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**INDUSTRIAL PROPERTY LAWS AND TREATIES
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Editor's Note**GERMANY, FEDERAL REPUBLIC OF**

Utility Model Law (Text of August 28, 1986)	Text 2-003
Order Concerning Patent Applications (of May 29, 1981, and amended on November 12, 1986) (replacement sheet)	Text 2-004

LIECHTENSTEIN

Law on the Protection of Trademarks and Service Marks, Indications of Source of Goods and Commercial Awards (of October 26, 1928, as amended by the Laws of August 7, 1952, January 9, 1964, and December 19, 1985)	Text 3-001
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MULTILATERAL TREATIES**European Communities**

Council Regulation (EEC) No. 3842/86 of December 1, 1986, Laying Down Measures to Prohibit the Release for Free Circulation of Counterfeit Goods	Text 3-003
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Notifications Concerning Treaties

Budapest Treaty

I. Change in the Name and in the List of Kinds of Microorganisms Accepted for Deposit

AGRICULTURAL RESEARCH CULTURE COLLECTION (NRRL)

The Government of the United States of America has notified the Director General of WIPO on May 21, 1987, of the change in the name of the "Agricultural Research Culture Collection (NRRL)" to the "Agricultural Research Service Culture Collection" and that the list of kinds of microorganisms accepted by that Collection under the Budapest Treaty (see Budapest Notification No. 12, of December 8, 1980, *Industrial Property*, 1981, p. 22) is as follows:

1. All strains of agriculturally and industrially important bacteria, yeasts, molds and *Actinomyce-tales*, except:

- a. *Actinobacillus* (all species);
Actinomyces (anaerobic/microaerophilic, all species);
Arizona (all species);
Bacillus anthracis;
Bartonella (all species);
Bordetella (all species);
Borrelia (all species);
Brucella (all species);
Clostridium botulinum;
Clostridium chauvoei;
Clostridium haemolyticum;
Clostridium histolyticum;
Clostridium novyi;
Clostridium septicum;
Clostridium tetani;
Corynebacterium diphtheriae;
Corynebacterium equi;
Corynebacterium haemolyticum;
Corynebacterium pseudotuberculosis;
Corynebacterium pyogenes;
Corynebacterium renale;
Diplococcus (all species);
Erysipelothrix (all species);
Escherichia coli (all enteropathogenic types);
Francisella (all species);
Haemophilus (all species);
Herellea (all species);
Klebsiella (all species);

- Leptospira* (all species);
- Listeria* (all species);
- Mima* (all species);
- Moraxella* (all species);
- Mycobacterium avium*;
- Mycobacterium bovis*;
- Mycobacterium tuberculosis*;
- Mycoplasma* (all species);
- Neisseria* (all species);
- Pasteurella* (all species);
- Pseudomonas pseudomallei*;
- Salmonella* (all species);
- Shigella* (all species);
- Sphaerophorus* (all species);
- Streptobacillus* (all species);
- Streptococcus* (all pathogenic species);
- Treponema* (all species);
- Vibrio* (all species);
- Yersinia* (all species).

- b. *Blastomyces* (all species);
Coccidioides (all species);
Cryptococcus neoformans;
Cryptococcus uniguttulatus;
Histoplasma (all species);
Paracoccidioides (all species).
- c. All viral, Rickettsial, and Chlamydial agents.
- d. Agents which may introduce or disseminate any contagious or infectious disease of animals, humans or poultry and which require a permit for entry and/or distribution within the United States of America.
- e. Agents which are classified as plant pests and which require a permit for entry and/or distribution within the United States of America.
- f. Mixtures of microorganisms.
- g. Fastidious microorganisms which require (in the view of the Curator) more than reasonable attention in handling and preparation of lyophilized material.
- h. Phages not inserted in microorganisms.
- i. Monoclonal antibodies.
- j. All cell lines.
- k. Plasmids not inserted in microorganisms.

2. The Agricultural Research Service Culture Collection will accept recombinant strains of microorganisms, strains containing recombinant DNA molecules, strains containing their own naturally occurring plasmid(s), strains containing inserted naturally occurring plasmid(s) from another

host, strains containing inserted constructed plasmid(s), and strains containing viruses of any kind, excluding those already listed as nonacceptable, only if the deposit document accompanying the microbial preparation(s) includes a clear statement that progeny of the strain(s) can be processed at a Physical Containment Level of P1 or less and Biological Containment requirements meet all other criteria specified by the U.S. Department of Health and Human Services, National Institutes of Health; "Guidelines for Research Involving Recombinant DNA Molecules, December 1978" (*Federal Register*, Vol. 43, No. 247—Friday, December 22, 1978) and any subsequent revisions.

[End of text of the notification of the Government of the United States of America]

The change in the list of kinds of microorganisms accepted for deposit by the Agricultural Research Service Culture Collection will take effect from the date (August 31, 1987) of the present publication.

Budapest Communication No. 35 (this Communication is the subject of Budapest Notification No. 61, of June 10, 1987).

* * *

III. Acquisition of the Status of International Depository Authority

USSR RESEARCH INSTITUTE FOR GENETICS AND INDUSTRIAL MICROORGANISM BREEDING OF THE USSR MINISTRY OF THE MEDICAL AND MICROBIOLOGICAL INDUSTRY (VNIIGIMI)

INSTITUTE OF MICROORGANISM BIOCHEMISTRY AND PHYSIOLOGY OF THE USSR ACADEMY OF SCIENCE (IBFM AS USSR)

USSR RESEARCH INSTITUTE FOR ANTIBIOTICS OF THE USSR MINISTRY OF THE MEDICAL AND MICROBIOLOGICAL INDUSTRY (VNIIA)

The following written communication addressed to the Director General of WIPO by the Government of the Union of Soviet Socialist Republics under Article 7 of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure was received on June 24, 1987, and is published by the International Bureau of WIPO pursuant to Article 7(2)(a) of the said Treaty:

USSR RESEARCH INSTITUTE FOR GENETICS AND INDUSTRIAL MICROORGANISM BREEDING OF THE USSR MINISTRY OF THE MEDICAL AND MICROBIOLOGICAL INDUSTRY (VNIIGIMI)

1. Pursuant to the provisions of Article 7 of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, the Government of the Union of Soviet Socialist Republics hereby designates the USSR Research Institute for Genetics and Industrial

II. Extension of the List of Kinds of Microorganisms Accepted for Deposit

IN VITRO INTERNATIONAL, INC. (IVI)

The Government of the United States of America has notified the Director General of WIPO on May 21, 1987, that the list of kinds of microorganisms accepted for deposit under the Budapest Treaty by In Vitro International, Inc. (IVI) (see Budapest Notification No. 34, of November 3, 1983, *Industrial Property*, 1983, p. 306) has been extended to include seeds.

The said extension of the list of kinds of microorganisms accepted for deposit by In Vitro International, Inc. will take effect from the date (August 31, 1987) of the present publication.

Budapest Communication No. 36 (this Communication is the subject of Budapest Notification No. 62, of June 10, 1987).

Microorganism Breeding of the USSR Ministry of the Medical and Microbiological Industry as an international depository authority.

2. The collection of industrial microorganisms at the aforementioned Institute complies and will continue to comply with all the conditions set forth in Article 6(2) of the Budapest Treaty.

3. Name and address of the depository institution:

USSR Research Institute for Genetics and Industrial Microorganism Breeding;

Address: USSR, 113545, Moscow, Dorozhnaya Street, No. 8, USSR Research Institute for Genetics and Industrial Microorganism Breeding, USSR Collection of Microorganisms.

4. Information concerning the conditions set forth in Article 6(2) of the Budapest Treaty:

The USSR Collection of Industrial Microorganisms was created in 1969 as the central collection of the General Directorate of the Microbiological Industry of the USSR Council of Ministers; it collects industrial microorganism strains and also genetically-marked strains necessary for the execution of research work in the field of molecular genetics, microorganism genetics, genetic engineering, etc.

Since 1976 it has been performing the functions of microorganism depository body for the purposes of patent procedure, pursuant to the provisions of the USSR legislation on inventions.

The USSR Collection of Industrial Microorganisms is a subdivision of the USSR Research

Institute for Genetics and Industrial Microorganism Breeding; its expenses are defrayed by the budget of the State.

The staff assigned to the Collection are highly qualified: eight persons are holders of science degrees or doctorates.

The Collection comprises seven sections organized according to taxonomic or functional criteria: (1) fungi, (2) yeasts, (3) actinomycetes, (4) industrial bacteria, (5) genetically-marked bacteria, (6) phages, (7) producers of ferments from nucleic acid exchange. The head of each section is the holder of the title of Biological Science Licentiate, or has at least engaged in university studies. The Collection further has a microorganism cytology group and a department for the verification and recording of strains.

The Collection carries out its functions impartially and objectively, observing the necessary rules regarding secrecy and, for the purposes of deposits under the Treaty, it accords the same terms to all depositors.

The collection has four microbiological research laboratories, one room for the lyophilization of microorganisms, one storage area for the preservation of lyophilized cultures at a temperature of +12°C and another for the storage of cultures at low temperature (+5°C, -20°C, -70°C and -196°C).

5. Types of microorganisms accepted for deposit:

Bacteria (including actinomycetes) and microscopic fungi (including yeasts) for essentially industrial and non-medical purposes are accepted for deposit, to the exclusion of microorganisms that cause disease in man and animals and microorganisms that have a toxicogenic effect on plants or require them to be quarantined.

6. Types of fee and amounts:

	Roubles
— for the deposit of a microorganism and its storage for 30 years	800
— for each additional five-year period of storage	100
— for the furnishing of a sample of a deposited microorganism	50

The above amounts do not include mailing charges, which are invoiced separately at cost.

7. Official language:

The official language is Russian. Correspondence may also be exchanged in English.

INSTITUTE OF MICROORGANISM BIOCHEMISTRY AND
PHYSIOLOGY OF THE USSR ACADEMY OF SCIENCE
(IBFM AS USSR)

1. Pursuant to the provisions of Article 7 of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of

Patent Procedure, the Government of the Union of Soviet Socialist Republics hereby designates the Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science as an international depositary authority.

2. The collection of microorganisms of the aforementioned Institute complies and will continue to comply with all the conditions set forth in Article 6(2) of the Budapest Treaty.

3. Name and address of the depositary institution:

Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science;

Address: USSR, 142292, Moscow Region, Pushchino-na-Oke, Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science, USSR Collection of Microorganisms.

4. Information concerning the conditions set forth in Article 6(2) of the Budapest Treaty:

The USSR Collection of Microorganisms was created in 1958 as a model cultures section of the Microbiology Institute of the USSR Academy of Science, and since 1981 it has been operating as a USSR Collection of Microorganisms at the Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science. Its expenses are defrayed by the budget of the State.

The staff assigned to the Collection are highly qualified: 12 persons are holders of science degrees or doctorates.

The Collection comprises subdivisions specialized by microorganism category (actinomycetes, bacteria, fungi, yeasts and cells embodying recombinant DNA) and according to storage methods and chemotaxonomic characteristics; its premises are located in Moscow and in Pushchino-na-Oke. It has laboratories for the storage of lyophilized cultures, a room equipped for the lyophilization of microorganisms and special areas for the storage of microorganisms either in liquid nitrogen or at a temperature of +4° to +5°C. The Collection has a separate depot in which duplicates of all microorganism cultures are kept. This measure is designed to afford more reliable storage for microorganism cultures in the Collection or on deposit.

The Collection is highly experienced in the deposit of microorganisms for the purposes of patent procedure in the USSR. It carries out all its functions in compliance with all the necessary rules of secrecy, impartially and objectively, and accords the same terms to all depositors, which is fully in keeping with the conditions set forth in the Budapest Treaty and the Regulations under it.

5. Types of microorganism accepted for deposit:

Bacteria (including actinomycetes) and microscopic fungi (including yeasts), also if they are car-

riers of recombinant DNA, are accepted for deposit, to the exclusion of microorganisms that cause diseases in man and animals and microorganisms that have a toxicogenic effect on plants or require them to be quarantined.

6. Types of fee and amounts:

	Roubles
— for the deposit of a microorganism and its storage for 30 years	800
— for each additional five-year period of storage	100
— for the furnishing of a sample of a deposited microorganism	50

The above amounts do not include the mailing charges, which are invoiced separately at cost.

7. Official language:

The official language is Russian. Correspondence may also be exchanged in English.

USSR RESEARCH INSTITUTE FOR ANTIBIOTICS
OF THE USSR MINISTRY OF THE MEDICAL AND
MICROBIOLOGICAL INDUSTRY (VNIIA)

1. Pursuant to the provisions of Article 7 of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, the Government of the Union of Soviet Socialist Republics hereby designates the USSR Research Institute for Antibiotics of the USSR Ministry of the Medical and Microbiological Industry as an international depositary authority.

2. The collection of microorganisms of the aforementioned Institute complies and will continue to comply with the conditions set forth in Article 6(2) of the Budapest Treaty.

3. Name and address of the depositary institution:

USSR Research Institute for Antibiotics;
Address: USSR, 113105, Moscow, Nagatinskaya Street 3-a, USSR Research Institute for Antibiotics, Collection of Microorganisms.

4. Information concerning the conditions set forth in Article 6(2) of the Budapest Treaty:

The Collection has existed since 1956 as a subdivision of the USSR Research Institute for Antibiotics. Its expenses are defrayed by the budget of the State.

The Collection has been taking care of the deposit of microorganisms for the purposes of patent procedure since 1966.

The highly-qualified staff assigned to the collection have sufficient qualifications for the accomplishment of the scientific and administrative tasks incumbent on them under the Budapest Treaty. The Collection is highly experienced in the preservation of the taxonomic properties and of the

activity of antibiotic-producing strains. It carries out its functions impartially and objectively, observing the necessary rules concerning secrecy and, for the purposes of deposits under the Budapest Treaty, it accords the same terms to all depositors.

The Collection has the necessary premises, which comprise a cold room and a lyophilization plant for microorganisms. All the cultures in the collection are stored in their lyophilized state at +5°C; the storage of the duplicates takes the form of storage in the ground, in mineral oil, or periodical re-seeding. There are also plans to make use of the method of storage in liquid nitrogen in the future.

5. Types of microorganism accepted for deposit:

Bacteria (including actinomycetes) and microscopic fungi (including yeasts) for essentially medical purposes are accepted for deposit, to the exclusion of microorganisms that cause disease in man and animals and microorganisms that are toxicogenic for plants or require them to be quarantined.

6. Types of fee and amounts:

	Roubles
— for the deposit of a microorganism and its storage for 30 years	800
— for each additional five-year period of storage	100
— for the furnishing of a sample of a deposited microorganism	50

The above amounts do not include mailing charges, which are invoiced separately at cost.

7. Official language:

The official language is Russian. Correspondence may also be exchanged in English.

REGULATIONS
ON THE COLLECTION OF PAYMENTS (FEES)
CHARGED FOR THE SERVICES PROVIDED BY
THE INTERNATIONAL DEPOSITARY AUTHORITIES
IN THE USSR UNDER THE BUDAPEST TREATY ON THE
INTERNATIONAL RECOGNITION OF THE DEPOSIT
OF MICROORGANISMS FOR THE PURPOSES OF
PATENT PROCEDURE

1. Pursuant to the provisions of Article 7 of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, the following institutions are hereby designated as international depositary authorities in the USSR:

- USSR Research Institute for Genetics and Industrial Microorganism Breeding of the USSR Ministry of the Medical and Microbiological Industry (VNIIGIMI);
- Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science (IBFM AS USSR);

— USSR Research Institute for Antibiotics of the USSR Ministry of the Medical and Microbiological Industry (VNIIA).

Pursuant to Rule 12 of the Regulations under the Budapest Treaty, the aforementioned three institutions charge payments (fees) in the following amounts for the deposit of microorganisms for the purposes of patent procedure and for the other services that they provide:

	Roubles
— for the deposit of a microorganism and its storage for 30 years	800
— for each additional five-year period of storage	100
— for the furnishing of a sample of a deposited microorganism, except where the sample is furnished under Rule 11.1 of the Regulations under the Budapest Treaty	50
— charge for dispatch by post	according to real cost

2. The prescribed fees have to have been settled on the date of the submission of the corresponding declarations to the international depositary authority.

Payments relating to the initial deposit may be made later, but before the expiry of a month from the day on which the depositor receives confirmation of receipt of the microorganism from the international depositary authority.

By way of confirmation of payment, the depositor sends the corresponding bank advice to the international depositary authority.

3. If the depositor allows the time limit for payment for the initial deposit, mentioned under 2 in these Regulations, to expire, he may still pay the fee, increased by 10%, on condition that he does so within six months following the date on which the declaration of deposit was submitted.

If the international depositary authority does not, within a period of six months following the date of submission of the declaration of deposit, receive proof of payment of the fee, the declaration of deposit is treated as if it has not been submitted.

4. The sums paid by way of fees may be repaid at the request of the person who filed the declaration in the following circumstances:

- if the payment was made by mistake;
- if the depositor requests the return of the microorganism that he has submitted for deposit before a certificate attesting the receipt and acceptance of the microorganism is issued to him;
- if the sample of the microorganism furnished on request proves non-viable:

The amount paid is repaid after deduction of any expenses that may have been incurred.

5. Foreign natural persons and legal entities that have their domicile or permanent headquarters abroad make the payment provided for in these Regulations by transferring the corresponding sums in currency to account No. 71.680.084 of the USSR Academy of Science at the USSR Foreign Trade Bank (IBFM AS USSR collection) or to account No. 716.300.030 of the USSR Ministry of the Medical and Microbiological Industry, also at the USSR Foreign Trade Bank (VNIIGIMI and VNIIA collections).

6. Expenses arising from the deposit of microorganisms for the purposes of patent procedure by natural persons and legal entities of the USSR, and also from the furnishing to natural persons or legal entities of the USSR of samples of deposited microorganisms, are met by the IBFM AS USSR, the VNIIGIMI and the VNIIA within the limits of available finance.

7. On request, the prescribed amount of fees may be reduced by 50% for depositors from developing countries.

The decision to reduce the amount of a fee is taken by the President of the USSR Academy of Science or by the USSR Minister of the Medical and Microbiological Industry.

The request for a reduction in the amount of fees has to be accompanied by a declaration stating that the depositor is a natural person or legal entity of a developing country, with domicile or permanent headquarters in that developing country, and that the isolation or production of the microorganism is in no way associated with the activity of natural persons or legal entities of countries other than developing countries.

(Translation)

[End of text of the notification of the Government of the Union of Soviet Socialist Republics]

Pursuant to Article 7(2)(b) of the Budapest Treaty, the USSR Research Institute for Genetics and Industrial Microorganism Breeding of the USSR Ministry of the Medical and Microbiological Industry (VNIIGIMI), the Institute of Microorganism Biochemistry and Physiology of the USSR Academy of Science (IBFM AS USSR) and the USSR Research Institute for Antibiotics of the USSR Ministry of the Medical and Microbiological Industry (VNIIA) acquire the status of international depositary authority as from August 31, 1987.

Budapest Communication No. 37 (this Communication is the subject of Budapest Notification No. 63, of July 28, 1987).

WIPO Meetings

WIPO Permanent Program for Development Cooperation Related to Industrial Property

Permanent Committee

Eleventh Session
(Geneva, May 5 to 8, 1987)

NOTE*

The WIPO Permanent Committee for Development Cooperation Related to Industrial Property (hereinafter referred to as "the Permanent Committee") held its eleventh session in Geneva from May 5 to 8, 1987.¹ The following 60 States members of the Permanent Committee were represented: Algeria, Argentina, Australia, Bangladesh, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Central African Republic, China, Colombia, Costa Rica, Côte d'Ivoire, Cuba, Egypt, France, Gabon, Gambia, German Democratic Republic, Germany (Federal Republic of), Ghana, Guatemala, Guinea, Honduras, India, Indonesia, Italy, Japan, Kenya, Libya, Malawi, Mauritania, Mexico, Morocco, Netherlands, Niger, Pakistan, Panama, Paraguay, Peru, Republic of Korea, Rwanda, Senegal, Somalia, Soviet Union, Spain, Sudan, Sweden, Switzerland, Togo, Tunisia, Uganda, United Kingdom, United Republic of Tanzania, Uruguay, Venezuela, Yugoslavia, Zaire, Zambia. In addition, the following six non-member States also attended: Ecuador, Lebanon, Madagascar, Saudi Arabia, Syria, Trinidad and Tobago. Eight intergovernmental organizations (African Intellectual Property Organization (OAPI), African Regional Centre for Technology (ARCT), African Regional Industrial Property Organization (ARIPO), European Patent Organisation (EPO), General Agreement on Tariffs and Trade (GATT), Latin American Economic System (SELA), League of Arab States (LAS), United Nations Development Programme (UNDP)) and one international non-governmental organization (International Association for the Protection of Industrial Property (AIPPI)) were also represented. The list of participants follows this Note.

* Prepared by the International Bureau.

¹ For a note on the preceding session, see *Industrial Property*, 1986, p. 297.

The Permanent Committee reviewed activities carried out, since its last session, under the WIPO Permanent Program for Development Cooperation Related to Industrial Property, as well as orientations and plans for future activities.

The Permanent Committee noted with satisfaction the activities carried out under the Permanent Program since its previous session and the expansion of the Program which had taken place during that period and invited the International Bureau to continue to pursue the expansion of the Program, with special emphasis on training, support for the strengthening of national and regional institutions, including patent documentation centers, advice on legislation, and assistance for the study and better understanding of the implications of the legal protection of emerging technologies. The Permanent Committee expressed its gratitude to the numerous governments and organizations, including the UNDP, which make extra-budgetary cash contributions or contributions in kind to the Permanent Program, and noted with appreciation the statements made by the representatives of several of those governments and organizations that they intended to continue and, if possible, increase such contributions. The Permanent Committee again underlined the importance that it attached to annual meetings of the Permanent Committee as an effective forum for the review and orientation of the Permanent Program.

The Permanent Committee considered that training remained a major priority for the Permanent Program. In that respect, the Permanent Committee supported the efforts of the International Bureau to continue to diversify and make more specialized the training program (both in terms of subject matter (e.g., patent information, licensing, new technologies, trademarks, use of industrial property for the promotion of exports) and the groups of individuals to whom training opportunities are addressed (such as the judiciary, university professors, the legal profession, etc.)) and to bring the training program closer to the users (through an increasing number of training activities in developing

countries). At the same time, the Permanent Committee stressed that the International Bureau should nevertheless continue to offer a sufficient number of introductory courses.

The Permanent Committee invited the International Bureau to continue to organize seminars, forums or similar meetings, at a regional level, on matters of specific concern to countries in the region, including matters involving the effective use of the industrial property system for the development of industry and external trade, and emphasized that the inclusion in such meetings of representatives from the public and private economic sectors concerned would be desirable.

The Permanent Committee noted with satisfaction the information provided by the International Bureau on the directions and objectives for the training program in the medium and long term, with particular reference to the establishment of curricula and related teaching material in the field of industrial property and the progressive creation of a network of training centers located in both developing countries (on a regional basis) and in industrialized countries.

As regards activities for the promotion of inventive and innovative activity in developing countries, the Permanent Committee invited the International Bureau to accelerate the preparation of the study on the patent management and licensing operations of research and development institutions in developing countries, and of the study on possible arrangements for the promotion of technological innovation in developing countries. Several delegations expressed interest in seeing the results and recommendations of the two studies implemented and tested in the framework of a pilot project. The International Bureau stressed that the promotion of inventive and innovative activity would continue to be a major task and item in future activities under the Permanent Program.

At its tenth session, in April 1986, the Permanent Committee had recommended that it should devote part of some of its future sessions to examining certain specific matters affecting the orientation or implementation of the Permanent Program and had suggested, as such possible matters, licensing, industrial property protection of new subject matter, patent information and documentation, and utilization of human resources and institutions in developing countries within the framework of the Permanent Program. At its eleventh session, the Permanent Committee was invited to indicate how it intended to deal with the task referred to in the above recalled recommendation. The Permanent Committee decided that it would devote one day of its five-day 1988 session to the examination of patent documentation and information matters and one day of its five-day 1989 session to the examination of licensing matters, and it requested the Director General to take appropriate measures to organize the examination of those matters in the form of a symposium.

In the course of the discussions of this agenda item, several delegations stated that, whatever the subject

matter chosen for discussions, the International Bureau should facilitate the participation of specialists and officials directly involved from developing countries. Also, several delegations, referring to the proposed restructuring of the WIPO Permanent Committee on Patent Information (PCPI), expressed the wish that the financial means formerly available to developing countries to participate in the meetings of the Working Group on Patent Information for Developing Countries of the PCPI should continue to be made available to those countries in order to enable them to participate in the work of the Working Groups contemplated in the new structure of the PCPI.

The Permanent Committee emphasized the importance of cooperation among developing countries in the field of industrial property, as well as the need to continue to promote and support it in all aspects of the Permanent Program. The utilization of experts and lecturers from developing countries in other developing countries, the promotion and implementation of regional and subregional projects, training within regions and the organization of regional meetings on industrial property subjects of common concern to countries of the region were, in particular, mentioned as positive factors in such promotion. With specific reference to the participation of experts from developing countries as consultants in WIPO development cooperation projects and as lecturers in WIPO training courses, seminars and workshops, the Director General informed the Permanent Committee that he intended to send a circular to all developing countries, requesting them to identify experts from their countries.

Delegations of ARIPO member States expressed their gratitude for the assistance rendered to ARIPO following the appeal made at the tenth session of the Permanent Committee in 1986 to all States members of WIPO, the UNDP and International Bureau in order that ARIPO could be given assistance enabling it to overcome its difficult financial situation.

Finally, the Permanent Committee paid a warm tribute and expressed its gratitude to Mr. Marino Porzio, Deputy Director General of WIPO, who left the Organization in May 1987, shortly after the session of the Permanent Committee.

LIST OF PARTICIPANTS**

I. States

Algeria: H. Redouane. **Argentina:** M.R. Solanet; J.M. Giacone; D. Chuburu. **Australia:** S.H.R. Hume. **Bangladesh:** M. Rahman. **Benin:** F.M. Adande. **Brazil:** R. Stille; J.C. Muricy. **Bulgaria:** O. Delev. **Burkina Faso:** A. Seye. **Cameroon:** W. Eyambe. **Central African Republic:** M. Lamine. **China:** Zhao-Qi Zhang. **Colombia:**

** A list containing the titles and functions of the participants may be obtained from the International Bureau.

L.-A. Luna. **Costa Rica:** E. Soley Soler; J. Rhenan Segura. **Côte d'Ivoire:** K.F. Ekra. **Cuba:** M. Jiménez Aday. **Ecuador:**² R.A. Rivadeneira. **Egypt:** W.Z. Kamil. **France:** M. Guerrini; J.-B. Mozziconacci. **Gabon:** J. Obounou-Mbogo. **Gambia:** M.A. Ceesay. **German Democratic Republic:** K.-D. Peters. **Germany (Federal Republic of):** D. Schennen. **Ghana:** A.M. Abdullah. **Guatemala:** L. González. **Guinea:** F. Bangoura. **Honduras:** N. Valenzuela; I. Juárez de Oqueli; M. de los A. Narváez. **India:** A. Malhotra. **Indonesia:** H. Wayarabi; B. Prayitno. **Italy:** M.G. Fortini. **Japan:** Y. Masuda. **Kenya:** J.N. King'Arui; H.B.N. Gicheru. **Lebanon:**² N. Fattal. **Libya:** G. Ferjani. **Madagascar:**² R.G. Razafimahefa. **Malawi:** I.J. Mtambo. **Mauritania:** M. Diaby. **Mexico:** M.A. Arce de Jeannet. **Morocco:** A. Bendaoud. **Netherlands:** W. Neervoort. **Niger:** G. Hassane. **Pakistan:** M.A. Khan. **Panama:** I. Aizpurua Perez; M. Saavedra. **Paraguay:** L. González-Arias; R.A. Bogado Vázquez; M. Frutos Britos. **Peru:** R. Carrillo Valdes. **Republic of Korea:** S.M. Cha; J.K. Kim; T.-C. Choi. **Rwanda:** B. Murekezi. **Saudi Arabia:**² A. Omair. **Senegal:** A.M. Dieng. **Somalia:** B.A. Osman. **Soviet Union:** B.V. Smirnov; V.A. Blatov. **Spain:** S. Jessel. **Sudan:** M.A. El Tahir. **Sweden:** U. Jansson. **Switzerland:** E. Caussignac; T.-L. Tran-Thi. **Syria:**² N. Chaalan; S. Chahabi. **Togo:** K.A. Kato. **Trinidad and Tobago:**² J.-E. George. **Tunisia:** H. Boufares; M. Baati. **Uganda:** P.L. Nsibirwa. **United Kingdom:** D.M. Haselden. **United Republic of Tanzania:** R.B. Mngulwi; E.E.E. Mtango; K.J. Suedi. **Uruguay:** A. Prat Gutiérrez; C. Sarlabos; R. González Arenas. **Venezuela:** H.C. Azócar. **Yugoslavia:** R. Tešić. **Zaire:** Massele La Lobato; Mukuna Kakolela. **Zambia:** A.R. Zikonda.

II. United Nations Organizations

United Nations Development Programme (UNDP): E. Bonev; D. Charleson.

² State not member of the Permanent Committee.

III. Other Intergovernmental Organizations

African Intellectual Property Organization (OAPI): V. Efon; G. Meyo M'Emane. **African Regional Centre for Technology (ARCT):** B. Thomas. **African Regional Industrial Property Organization (ARIPO):** J.H. Ntabgoba. **European Patent Organisation (EPO):** J. Amand. **General Agreement on Tariffs and Trade (GATT):** F. Roessler. **Latin American Economic System (SELA):** L. Herrera Marciano. **League of Arab States (LAS):** Z. Tlili.

IV. International Non-Governmental Organizations

International Association for the Protection of Industrial Property (AIPPI): G.E. Kirker.

V. Officers

Chairman: A.R. Zikonda (Zambia). **Vice-Chairmen:** E. Caussignac (Switzerland); O. Delev (Bulgaria). **Secretary:** B. Machado (WIPO).

VI. International Bureau of WIPO

A. Bogsch (Director General); M. Porzio (Deputy Director General); K. Idris (Director, Development Cooperation and External Relations Bureau for Arab Countries); L. Kadirgamar (Director, Development Cooperation and External Relations Bureau for Asia and the Pacific); E. Pareja (Director, Development Cooperation and External Relations Bureau for Latin America and the Caribbean); I. Thiam (Director, Development Cooperation and External Relations Bureau for Africa); R. Andary (Head, Special Projects and Developing Countries Section, Classifications and Patent Information Division); B. Machado (Head, Development Cooperation Program Support Unit); J. Quashie-Idun (Head, Developing Countries Section, Industrial Property Division).

Paris Union

A. Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions

Third Session
(Geneva, March 23 to 27, 1987)

A Note prepared by the International Bureau on the third session of the Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions followed by three memoranda prepared by the International Bureau appeared in the June 1987 issue of *Industrial Property* on pages 204 to 234.

Four additional memoranda prepared by the International Bureau and submitted to the above-mentioned session of the Committee of Experts are reproduced below.

I. REQUIREMENTS IN RESPECT OF THE MANNER OF CLAIMING IN PATENT APPLICATIONS

(HL/CE/III/2 Supp. 1)

Memorandum by the International Bureau of WIPO

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ANNEX

I. Introduction

1. Under most, if not all, national laws and international treaties on the protection of inventions, the applicant must state in a claim what he considers to be the invention for which he seeks protection or, in other words, the subject matter which he desires to be protected.

2. In order to adequately define the invention or the subject matter to be protected, usually several claims are necessary.

3. The claims must develop their contents from the description, in other words, they must in some way be based upon the description.

4. Since the claims are the basis for the protection granted, they must have sufficient clarity.

5. Since patentability and infringement searches are made on the basis of the claims, the number of the claims and the way they are combined may influence the amount of time required for such a search and are, therefore, subject to regulation.

6. For the purposes of this memorandum, the expression "manner of claiming" encompasses both substantive aspects (indication of what is desired to be protected, connection between description and claims, clarity) and formal aspects (categories of claims, number and numbering of claims, structure and formal contents of claims, claims dependency).

7. To the extent that the manner of claiming is differently regulated under different national laws or treaties, the applicant who seeks protection in a number of countries is confronted with the task of formulating the claims accordingly, either at the time of filing or, by amendment, after filing, which places a considerable burden of work on him. It would therefore seem to be appropriate to examine possibilities for uniform rules (harmonization) at the international level.

II. Purpose of the Memorandum

8. The purpose of this memorandum* is to examine and compare the requirements regarding the manner of claiming under the national laws and regulations of eight countries (enumerated in paragraph 10, below), as well as under the Patent Cooperation Treaty (PCT), the European Patent Convention (EPC) and the Agreement on the Unification of Requirements for the Execution and Filing of Applications for

* Prepared by the International Bureau with the help of Mr. A. Hüni (Switzerland) and Mr. A.T. Puister (Netherlands) as consultants.

Inventions concluded in Leipzig on July 5, 1975, within the framework of the Council of Mutual Economic Assistance (hereinafter referred to as the "Agreement on Unification") with a view to evaluating the possibilities of harmonization in this regard.

9. The comparative analysis focuses primarily on the following questions: (i) the contents of the claims, (ii) the relation of the claims to the description, (iii) the style of the claims, (iv) claims dependency, and (v) fees. However, the question of fees, while included in the comparative analysis in order to make it complete, is not proposed to be included in the envisaged harmonization effort.

III. Existing Legislative Provisions

A. Information Used in the Present Memorandum

10. Before any uniform solutions are proposed, it may be useful to examine the requirements under existing laws in respect of the manner of claiming and primarily the questions identified in paragraph 9, above. For this purpose, the following information has been taken into account:

- (i) the provisions of the PCT;
- (ii) the provisions of the EPC;
- (iii) the provisions of the Agreement on Unification; and
- (iv) the legislation (laws, regulations, etc.) of those eight countries in which or for which, according to the statistics published by WIPO (IP/STAT/1983/B), more than 10,000 titles of protection for inventions were granted in 1983. Those countries are Canada (20,999), France (25,043), Germany (Federal Republic of) (20,913), Japan (54,701), the Soviet Union (74,200), Switzerland (11,768), the United Kingdom (28,254) and the United States of America (56,862). The figures indicate the number of patents granted in 1983, except for the Soviet Union, where they indicate the total number of patents and inventors' certificates granted in the said year.

11. In general, the present memorandum is based on legislative provisions (treaties, laws, regulations, etc.) and does not take into account the interpretation given to the said provisions by courts and industrial property offices or the practice of industrial property offices. The present memorandum only presents a short summary of the said provisions; the summaries have not been verified by the industrial property offices concerned.

12. In the following paragraphs, a short explanation is given with respect to the meaning of the following technical terms: (i) category of claims, (ii) independent claim, (iii) dependent claim, and (iv) multiple dependent claim.

13. Four categories of claims are recognized, namely: the category of a claim for a *product*, for example, a particular chemical substance or an article such as a particular glove; the category of a claim for a *process*, for example, a process for manufacturing the chemical substance or the glove; the category of a claim for a *use*, for example, the use of the chemical substance as a herbicide or of the glove for manipulating very hot objects; and the category of a claim for a *means*, for example, a particular vessel, in which the process for the manufacture of the chemical substance can be carried out, or an apparatus for manufacturing the glove. The distinction between those four categories of claims is primarily relevant to unity of invention, which is the subject of a separate study (see document HL/CE/III/2 Supp.2, below).

14. An *independent claim* is a claim which recites all technical features which define the subject matter to be protected. Although it usually does not refer to any other claim, it may contain such a reference but without stating an additional, limiting feature (see the next paragraph); for example, assuming a first claim relates to a certain product, a second claim can relate to a process for the manufacture of the product as claimed in claim 1, or to another product defined by a reference to the product as claimed in claim 1 wherein feature X is replaced by feature Y. Such a claim, which is an independent claim, must be distinguished from a dependent claim (see the next paragraph).

15. A *dependent claim* is a claim which includes all the features of an independent claim or another dependent claim by reference to that other independent or dependent claim and states an additional, limiting feature. Thus, an application may contain an independent claim for a new hammer, characterized by a head of a particular shape; a dependent claim will refer to that claim, thereby including the feature of the particularly shaped head, and will state a limiting feature, for example, that the head is made of iron.

16. A *multiple dependent claim* is a claim which (i) refers to more than one other claim (each of which can be an independent claim or, itself, a dependent claim), which (ii) includes all features of a given claim in connection with which, among the claims it refers to, it is considered, and which (iii) states an additional, limiting feature. Thus, one may add to the independent claim for a hammer and the dependent claim stating that its head is made of iron, which are mentioned in the previous paragraph, a multiple dependent claim referring to those two claims and stating that the handle in a hammer corresponding to the definition given in either one of those two claims is of a particular shape.

B. The Patent Cooperation Treaty (PCT)

17. Article 6 of the PCT stipulates that the claim or claims must define the matter for which protection is sought. This definition must be in terms of the technical features of the invention (Rule 6.3(a) of the Regulations under the PCT). The claims must be clear and concise (Article 6). They must not¹ contain drawings, but may contain chemical or mathematical formulae; they may also contain tables, if desirable (Rule 11.10).

18. The claims must be fully supported by the description (Article 6).

19. The claims must not unnecessarily rely, in respect of technical features, on references to the description or drawings and particularly not on references such as "described in ... of the description" and the like (Rule 6.2(a)).

20. Technical features in claims must, if the description contains drawings, be followed by the reference signs (preferably in parentheses) relating to such features, but only if the understanding of the claims is facilitated thereby (Rule 6.2(b)).

21. The claims must be structured in a statement indicating the features of the invention which, in combination, are prior art, and a characterizing portion, preceded by the words "characterized by" or the like, stating concisely the technical features which, in combination with the features stated in the statement, define the subject matter to be protected (Rule

¹ It should be noted that "it must not" means "it is not allowed to" and not "it is not required to."

6.3(b)); the designated States, however, may allow a different manner of claiming (Rule 6.3(c)).

22. Subject to PCT Rule 13.1,² the application may contain two or more independent claims of the same category which cannot readily be covered by a single generic claim (Rule 13.3) and/or two or more independent claims of different categories (Rule 13.2).

23. Subject to PCT Rule 13.1, it is permitted to include in the same application a reasonable number of dependent claims to specific forms of the invention contained in an independent claim, even if the features of any dependent claim could be considered an invention in themselves (Rule 13.4).

24. A claim which includes all the features of one (or more) other claims is called a "dependent" (or "multiple dependent") claim; it must include the features of the other claim(s) by reference—being placed if possible at the beginning—to those claims and must then state the additional features claimed (Rule 6.4(a)).

25. A multiple dependent claim must refer to the other claims in the alternative only (Rule 6.4(a)).

26. A multiple dependent claim cannot serve as a basis for any other multiple dependent claim (Rule 6.4(a)).

27. It is to be noted that any failure to use the manner of claiming referred to in paragraphs 25 and 26, above, has no effect in a designated State if the manner of claiming used satisfies the national law of that State (Rule 6.4(a)).

28. A dependent claim must be construed as including all the limitations contained in the claim in relation to which it is considered (Rule 6.4(b)).

29. All dependent claims referring back to a single previous claim, and all dependent claims referring back to several previous claims, must be grouped together to the extent and in the most practical way possible (Rule 6.4(c)).

30. The number of claims must be reasonable in consideration of the nature of the invention; the claims must be numbered consecutively in arabic numerals (Rule 6.1(a) and (b)).

C. *The European Patent Convention (EPC)*

31. Article 84 of the EPC provides that the claims must define the matter for which protection is sought and that they must be clear and concise.

32. The claims must be supported by the description (Article 84).

33. The claims must define the matter for which protection is sought in terms of the technical features of the invention (Rule 29(1) of the Implementing Regulations to the EPC, first sentence).

34. Wherever appropriate, the claims must contain a statement designating the subject matter of the invention and the technical features necessary for defining the claimed subject matter but which, in combination, are prior art and must contain a characterizing portion preceded by the

expression "characterized by" or the like, stating the technical features which, in combination with the features stated in the above-mentioned statement, it is desired to protect (Rule 29(1), second sentence).

35. Subject to the requirement of unity of invention, the application may contain two or more independent claims of the same category where it is not appropriate to cover the subject matter by a single claim (Rule 29(2)) and/or two or more independent claims of different categories (Rule 30).

36. Any claim stating the essential features of an invention may be followed by one or more claims concerning particular embodiments thereof (Rule 29(3)).

37. Any claim including all features of any other claim is a dependent claim; it must contain, if possible at the beginning, a reference to the other claim and then state the additional features to be protected; a dependent claim is also admissible if the claim it refers to is itself a dependent claim (Rule 29(4), first two sentences).

38. A dependent claim can refer to more than one other claim; it may also contain an independent invention (*Guidelines for Examination in the European Patent Office, Part C, Chapter III, 3.5 and 7.8*).

39. All dependent claims referring back to a single previous claim, and all dependent claims referring back to several previous claims, must be grouped together to the extent possible and in the most appropriate way possible (Rule 29(4), third sentence).

40. The number of claims must be reasonable considering the nature of the invention; they must be numbered consecutively in arabic numerals (Rule 29(5)).

41. The claims must not unnecessarily rely in respect of technical features on references to the description or drawings and particularly not on such references as "as described in ... of the description" and the like (Rule 29(6)).

42. Technical features in the claim must, if the description contains drawings, preferably be followed by reference signs relating to the features and placed between parentheses, but only if the intelligibility of the claim can thereby be improved; those reference signs are not to be considered as limiting the claim (Rule 29(7)).

43. For each claim over 10, a claim fee is to be paid within one month after filing (Rule 31(1)), otherwise the claim concerned is deemed abandoned (Rule 31(3)).

D. *The Agreement on the Unification of Requirements for the Execution and Filing of Applications for Inventions (Agreement on Unification)*

44. The claims must begin with the title of the invention (Rule 4 of the Rules under the Agreement on Unification).

45. The claims must be based wholly on the description (Rule 4).

46. The claims should not unnecessarily contain references to the description (Rule 4).

47. The claims must not contain drawings, but they may contain chemical and mathematical formulae; they may also contain tables, if necessary (Rule 16).

² PCT Rule 13.1 reads as follows: "The international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ('requirement of unity of invention')."

48. If an application contains drawings, the claims may, if this facilitates the understanding, contain references to the corresponding parts of the drawings in brackets (Rule 4).

49. There may be one or several claims in an application (Rule 4).

50. All claims must contain a restrictive part and a distinctive part connected with the phrase "characterized by" (Rule 4).

51. The restrictive part of the first (main) claim must contain the title of the invention and, if possible, its known features common to the nearest prior art (Rule 4).

52. An application may contain several inventions of different categories, the features of which must be given in the main claims (Rule 4).

53. The main claims should be given in a sequence corresponding to the title of the invention and must each be followed by any additional claims in sequence (Rule 4).

E. National Legislation

54. *Canada.* Section 36(2) of the Patent Act, 1952, as amended up to 1972, provides that the claims must state distinctly and in explicit terms what the applicant regards as new and for which he claims protection.

55. Claims must be fully supported by the disclosure and will only be allowed if all characteristics set forth in the claims are described in the disclosure (Section 25 of the Patent Rules).

56. Claims must be complete independently of any reference to any document referred to in the disclosure (Section 24 of the Patent Rules).

57. Subject to the requirement of unity of invention, an application can claim a product and a process for making the product, or a process and an apparatus especially adapted for carrying out the process (Sections 58 and 59 of the Patent Rules).

58. A dependent claim may refer by number to not more than three preceding claims (Section 26(1) of the Patent Rules).

59. A claim so referred to by number shall not refer by number to more than one preceding claim (Section 26(1) of the Patent Rules).

60. *France.* The claims must define the matter for which protection is sought; they must be clear and concise (Section 14^{ter} of the Patent Law of 1968, as last amended and supplemented in 1984).

61. The claims must be supported by the description (Section 14^{ter} of the Patent Law).

62. Unless the nature of the invention warrants a different procedure, a claim cannot be based with regard to its technical features on simple references to the description or drawings (Section 11 of the Decree on Applications for Patents and Utility Certificates and the Grant and Maintenance in Force of Such Titles).

63. Unless the nature of the invention warrants a different procedure, any claim must contain a preamble, setting forth the object of the invention and the characteristic features of a

technical nature which are necessary for the definition of the claimed elements but which in combination are part of the prior art, and a characterizing portion setting forth the technical features which in connection with the characteristic features given in the preamble are those for which protection is sought (Section 11 of the Decree).

64. The application may contain several independent claims of the same category, if the subject matter of the application cannot appropriately be covered by a single claim (Section 11 of the Decree). It may also contain independent claims of different categories, subject to the requirement of unity of invention (Section 12 of the Decree).

65. Any claim setting forth the essential characteristic features of the invention may be followed by one or more claims concerning specific embodiments of said invention (Section 11 of the Decree).

66. Where the application contains drawings, technical features in the claim must, in principle, be followed by reference signs relating to the features and placed between parentheses, if the intelligibility of the claim can thereby be improved; those reference signs are not to be construed as limiting the claim (Section 11(3) of the Order on the Filing of Applications for Patents and Utility Certificates and on the National Patent Register).

67. The claims must be numbered consecutively in arabic numerals (Section 11(1) of the said Order).

68. For each claim over 10, a claim fee must be paid (Order on Fees Collected by the National Institute of Industrial Property).

69. *Germany (Federal Republic of).* The claims specify what will be protected (Section 35(1) of the Patent Law of 1981).

70. The claims must not unnecessarily rely, in respect of technical features, on references to the description or drawings and particularly not on references such as "as described in ... of the description" and the like (Rule 4 of the Order Concerning Patent Applications of 1981).

71. If the application contains drawings, the features mentioned in the claims must preferably be followed by reference signs, if the intelligibility of the claim can thereby be increased (Rule 4).

72. Unless another form of drafting the claims is expedient, the claims must contain a statement indicating the distinguishing features of the subject matter on which the invention is based, if said subject matter is part of the prior art or if the protection sought should not extend to one or several of said features separately, and a characterizing part indicating the other features of the invention for which protection is sought in connection with the first statement; the characterizing portion must be introduced by words such as "characterized in that" (Rule 4).

73. A patent application can contain several claims (Section 35).

74. The essential features of the invention must be indicated in the first claim (principal claim) (Rule 4).

75. Any principal (or independent) claim may be followed by one or more dependent claims concerning particular embodiments of the invention; such dependent claims must contain a reference to a preceding claim (Rule 4).

76. The enumeration of features in the distinguishing statement of a claim may be replaced by a reference to another preceding claim or statement consisting of the same features (Rule 4).
77. A dependent claim may refer to more than one preceding claims (Rule 4).
78. The dependent claims must be grouped together in the most appropriate way (Rule 4).
79. The claims must be numbered consecutively in arabic numerals (Rule 4).
80. *Japan*. The claim(s) must state only the indispensable constituent features of the invention or inventions described in the detailed explanation of the invention (Section 36(4) of the Patent Law of 1959, as last amended in 1985), which may be of different categories, subject to the requirement of unity of invention (Section 38).
81. For each of the inventions, a statement of the indispensable constituent features must be made in a numbered separate paragraph (Rule 24bis(i) of the Regulations under the Patent Law).
82. A specific form of the invention must be stated with reference to the indispensable constituent features of the invention stated in a claim or to another specific form of the invention and then specify a further technical limitation of the same (Rule 24bis(ii)).
83. For each specific form of the invention, a separate numbered paragraph must be used (Rule 24bis(iii)).
84. A specific form of an invention may refer to the indispensable constituent features of the invention and one or more specific forms of the invention or two or more specific forms of the invention and must be stated with the same technical limitations attached thereto (Rule 24bis(iv)).
85. In the case of the preceding paragraph, a multiple reference must be in the alternative only (Rule 24bis(iv)).
86. The references mentioned in paragraphs 84 and 85, above, must be made by number (Rule 24bis(v)). Claims referred to must precede claims referring to them (Rule 24bis(vi)).
87. The claims must be numbered in consecutive order (Rule 24bis(vii)).
88. No references to statements concerning other inventions are permitted in any claim (Rule 24bis(viii)).
89. *Soviet Union*. The description must end with the claims which must be the only criteria for defining the scope of the invention; the claims must be in the form of a briefly worded statement indicating the essence of the invention from a technical viewpoint; in the claims, a device must be characterized by reference to the features of its design, a process by reference to a certain sequence of actions (methods, and operations with the help of material objects), and a substance by reference to its ingredients and their quantitative ratios (Section 44 of the Statute on Discoveries, Inventions and Rationalization Proposals of 1973, as amended in 1978).
90. The Soviet Union is party to the Agreement on Unification (see paragraphs 44 to 53, above). Reference is therefore made to the more detailed provisions of that Agreement.
91. *Switzerland*. The invention is defined in one or more claims (Section 51(1) of the Federal Law on Patents for Inventions of 1954, as revised in 1976). They indicate the technical features of the invention and must be as clear and as concise as possible and must be supported by the description (Section 29(1) and (2) of the Ordinance on Patents for Inventions).
92. The claims must not, in general, contain references to the description or drawings or in particular to expressions such as "as described in part ... of the description" (Section 29(4) of the Ordinance).
93. Reference signs in the drawings pointing to the technical features of the invention must be set forth in parentheses in the claims if this makes them more easily understandable; they do not limit the claims (Section 29(5) of the Ordinance).
94. The claims must be structured in a systematic, clear and intelligible way (Section 29(3) of the Ordinance).
95. Subject to the requirement of unity of invention, the application can contain several independent claims of the same category or of different categories (Section 52(2) of the Law, Section 30(2) of the Ordinance).
96. Special embodiments of an invention defined in an independent claim can be set forth in dependent claims (Section 55 of the Law).
97. A dependent claim must refer to at least one preceding claim and contain the additional features which define the particular embodiment of its object (Section 31(1) of the Ordinance).
98. A dependent claim may refer in distinct form to several preceding dependent claims (Section 31(2) of the Ordinance). According to the practice of the Swiss Federal Intellectual Property Office, this reference may be cumulative or alternative (*Schweizerisches Patent-, Muster- und Markenblatt*, 1977, 69).
99. According to the practice of the said Office, dependent claims referring to several other dependent claims in a cumulative or alternative manner (multiple dependent claims) may serve as a reference basis for other multiple dependent claims (*Schweizerisches Patent-, Muster- und Markenblatt*, 1977, 69).
100. The dependent claims that refer to the same independent claim must be grouped together in a clear manner (Section 31(3) of the Ordinance), and must be numbered consecutively in arabic numerals (Section 29(6) of the Ordinance).
101. For each claim over 10, a fee must be paid (Section 55a of the Law).
102. *United Kingdom*. The claim or claims must define the subject matter for which protection is sought (Section 14(5)(a) of the Patents Act 1977). They must be clear and concise (Section 14(5)(b)). Subject to the requirement of unity of invention, independent claims of different categories are permitted (Rule 22 of the Patent Rules 1982, as last amended in 1985).
103. The claims must be supported by the description (Section 14(5)(c)).
104. The claims must not contain drawings, but may contain chemical or mathematical formulae; they may contain tables only if their subject matter makes the use of tables desirable (Rule 20(12)).

105. *United States of America.* The specification must conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention (Section 112 of the United States Code, Title 35 (Patents) (35 USC)). Subject to the requirement of unity of invention, claims of different categories are permitted (Section 1.141(b) of the Code of Federal Regulations, Title 37 (Patents, Trademarks and Copyrights) (37 CFR)).

106. The claim(s) must conform to the invention set forth in the description and the terms used in the claims must be clearly supported by the description so that their meaning is ascertainable (37 CFR 1.75(d)(1)).

107. Reference characters corresponding to elements recited in the description and drawings may be used in conjunction with the corresponding recitation of elements in the claims; they should be in parentheses; they are considered to have no effect on the scope of the claims (Paragraph 601(h) of the *Manual of Patent Examining Procedure*).

108. If appropriate, an independent claim should contain, *first*, a preamble setting forth all elements or steps of the invention which are conventional or known, *second*, a phrase like "wherein the improvement comprises" and, *third*, those elements, steps and/or relationships which the applicant considers the improved portion of the subject matter claimed (37 CFR 1.75(e)).

109. A claim may be written in independent or independent or multiple dependent form (35 USC 112).

110. A dependent claim must contain a reference to a preceding claim and then specify a further limitation (35 USC 112).

111. A multiple dependent claim must refer in the alternative only to more than one preceding claim and then specify a further limitation; it must not serve as a basis for another multiple dependent claim (35 USC 112).

112. Dependent or multiple dependent claims must be construed to incorporate all limitations of the claim(s) to which they refer or in relation to which they are considered (35 USC 112).

113. The claims must not be unduly multiplied and must be numbered in a consecutive order in arabic numerals; dependent claims should be grouped together with the claim(s) to which they refer to the extent possible (37 CFR 1.75(b), (f) and (g)).

114. A fee must be paid in respect of each independent claim in excess of three and for all claims exceeding 20; a multiple dependent claim or a claim depending on a multiple dependent claim will be calculated for those purposes as comprising as many claims as the multiple dependent claim refers back to (37 CFR 1.75(c)). In addition, if the application contains a multiple dependent claim(s), a special fee must be paid (37 CFR 1.16(d)).

F. Comparative Analysis

115. In the following, the major aspects of the manner of claiming are investigated as to their acceptance in the systems examined. In making this comparison, preference is given to the gist of the various provisions over the exact wording.

116. The laws of all eight countries examined consider the claims to indicate the invention or, in other words, the subject

matter for which protection is sought, as do the PCT, the EPC and the Agreement on Unification.

117. The PCT, the EPC and the laws of two countries (Soviet Union, Switzerland) specifically require that the claims must define the technical features of the invention.

118. The claims must be clear and concise (PCT, EPC, Switzerland, France, United Kingdom), explicit, distinct (Canada), particularly pointing out and distinctly claiming (United States of America), brief (Soviet Union).

119. The claims must not unnecessarily refer to the description (PCT, EPC, Agreement on Unification, France, Switzerland).

120. The claims must contain reference signs relating to corresponding features in drawings if this facilitates the understanding of the claim (PCT, EPC, Agreement on Unification, France, Germany (Federal Republic of), Switzerland, United States of America).

121. Reference signs in the claims relating to drawings must not be regarded as restricting the scope of the claims (EPC, France, Switzerland, United States of America). In the opinion of the International Bureau, this provision is of particular importance to applicants, because it avoids misinterpretation of the scope of such claims.

122. The claims must be supported by the description (PCT, EPC, Agreement on Unification, Canada, France, Germany (Federal Republic of), Japan, Switzerland, United Kingdom, United States of America). Among the said laws and treaties, the PCT, the Agreement on Unification, Canada and the United States of America require "full support." Since the word "full" has a strongly subjective quality, the unqualified term "support" is preferable in the opinion of the International Bureau.

123. The structuring of claims into a preamble indicating the main elements of the invention and a second, distinguishing part introduced by words such as "characterized in that" is provided for in the PCT, the EPC and the Agreement on Unification, as well as by the laws of France, Germany (Federal Republic of) and the United States of America. With the exception of the PCT and the Agreement on Unification, the relevant provisions state, however, that this solution is to be used only if appropriate. The PCT expressly permits the designated States to accept other solutions.

124. In the opinion of the International Bureau, a claim structured in the way described in the preceding paragraph has the distinctive advantage of enabling the reader to grasp very quickly the feature(s) considered by the applicant to impart novelty to what may be a complicated process, product or apparatus with many conventional features. Thus, it may be known to manufacture compound X by reacting compound A with compound B and compound C in a mixture of solvent D and water at a temperature of 70-90°C and under high pressure. The invention consists in carrying out this process in the presence of a catalyst E which results in increased yields of X. This process could (undesirably) be claimed as follows: "Process for the manufacture of X, wherein A is reacted with B and C in a mixture of D and water at a temperature of 70-90°C and under high pressure in the presence of catalyst E." Using the structure recommended, the claim would read: "Process for the manufacture of X by reacting A with B and C in a mixture of D and water at a temperature of 70-90°C and under high pressure, characterized in that it is carried out in the presence of catalyst E." The reader immediately recognizes that it is not the choice of the different compounds used or the solvent or the temperature or the pressure which is the gist of

the invention, but that the gist of the invention consists in the use of catalyst E.

125. A dependent claim is a claim which includes all the features (limitations) of another claim by reference to that claim and states the additional feature(s). This is provided for with minor variations in the PCT, the EPC, the Agreement on Unification, and the laws of Canada, France, Germany (Federal Republic of), Japan, Switzerland and the United States of America, and is consistent with the practice of the United Kingdom Patent Office.

126. A dependent claim can refer to more than one preceding claim (multiple dependent claim) (PCT, EPC, Canada, Germany (Federal Republic of), Japan, Switzerland, United Kingdom (practice), United States of America). However, the law of Canada restricts the number of claims, to which a dependent claim refers, to not more than three, and it provides that a claim referred to by number must not refer by number to more than one preceding claim.

127. The rule that a multiple dependent claim must contain the references in the alternative form only is contained only in the PCT and in the laws of Japan and the United States of America. However, claims not corresponding to that requirement are allowed under the PCT if they are accepted by the designated States.

128. The rule that a multiple dependent claim must not serve as a basis for reference for another multiple dependent claim can be found only in the PCT and the laws of Canada and the United States of America. However, claims not corresponding to that requirement are allowed under the PCT if they are accepted by the designated States, which is the case, for example, in the practice of the European Patent Office and the Swiss Federal Intellectual Property Office.

129. The requirements referred to in the preceding paragraph and in the second sentence of paragraph 126, above, and in particular the combination of those requirements, cause in practice a large increase of claims with repetitive contents. Such sets of claims are difficult to read and evaluate, much more so than the corresponding sets of claims using a logical system of multiple dependencies without those limitative requirements.

130. The following is a simple practical example illustrating the problem: the invention concerns a process, in which compound A is reacted with compound B in the presence of a solvent. The solvent is preferably water. Whether or not water is used as a solvent, a temperature of 70-80° is optimal, and, regardless of the other conditions, use of high pressure gives improved results.

(i) If no multiple dependent claims were possible, *eight* claims would be necessary:

Claim 1: Reaction of A + B in a solvent.

Claim 2: Reaction as claimed in claim 1, wherein water is used as the solvent.

Claim 3: Reaction as claimed in claim 1, wherein the reaction is carried out at 70-80°.

Claim 4: Reaction as claimed in claim 2, wherein the reaction is carried out at 70-80°.

Claim 5: Reaction as claimed in claim 1, wherein the reaction is carried out at high pressure.

Claim 6: Reaction as claimed in claim 2, wherein the reaction is carried out at high pressure.

Claim 7: Reaction as claimed in claim 3, wherein the reaction is carried out at high pressure.

Claim 8: Reaction as claimed in claim 4, wherein the reaction is carried out at high pressure.

(ii) If multiple dependent claims were possible but could not serve as a basis for reference for another multiple dependent claim, *five* claims would be necessary:

Claim 1: Reaction of A + B in a solvent.

Claim 2: Reaction as claimed in claim 1, wherein water is used as the solvent.

Claim 3: Reaction as claimed in claim 1 or 2, wherein the reaction is carried out at 70°-80°.

Claim 4: Reaction as claimed in claim 1 or 2, wherein the reaction is carried out at high pressure.

Claim 5: Reaction as claimed in claim 3, wherein the reaction is carried out at high pressure.

(iii) If multiple dependent claims were possible and could also serve as a basis for reference for other multiple dependent claims, *four* claims would suffice:

Claim 1: Reaction of A + B in a solvent.

Claim 2: Reaction as claimed in claim 1, wherein water is used as the solvent.

Claim 3: Reaction as claimed in claim 1 or 2, wherein the reaction is carried out at 70°-80°.

Claim 4: Reaction as claimed in claim 1, 2 or 3, wherein the reaction is carried out at high pressure.

Thus, with a minimum of claims and wording, the preferred embodiments can be presented in a logical, clear and transparent manner. Repetitions become unnecessary: in the first situation, the additional feature "70-80°" has to be repeated once and the further additional feature "high pressure" three times; in the second situation, the additional feature "high pressure" has still to be repeated once. How far the necessity of repetition can go with an increase in additional (or preferred) features is shown in the example given in the Annex to this document.

131. A dependent claim may set forth features which in themselves constitute an invention (PCT, EPC).

132. Subject to the requirement of unity of invention, the application may contain two or more independent claims of the same category (PCT, EPC, France, Japan, Switzerland, United States of America) and/or of different categories (PCT, EPC, Agreement on Unification, Canada, France, Japan, Switzerland, United Kingdom, United States of America). In the PCT, the EPC and under the law of France, two or more claims of the same category are permitted only if the subject matter cannot readily be covered in a single claim which, according to the PCT, must be generic.

133. All dependent claims should be grouped together in the most practical fashion (PCT, EPC, Germany (Federal Republic of), Switzerland, United States of America).

134. The number of claims should be reasonable considering the nature of the invention (PCT, EPC, United States of America).

135. The claims must be numbered in consecutive order in arabic numerals (PCT, EPC, France, Germany (Federal Republic of), Japan (which, however, does not prescribe the use of arabic numerals), Switzerland, United States of America).

136. Any claims stating the essential features of an invention may be followed by one or more claims to particular embodiments thereof (PCT, EPC, Agreement on Unification, Canada, France, Germany (Federal Republic of), Japan, Switzerland).

137. For each claim above a certain number, a claim fee is required (EPC, Canada, France, Switzerland, United States of America).

138. The claims must not contain any drawings but may contain chemical or mathematical formulae and, if desirable, tables (PCT, Agreement on Unification, United Kingdom).

139. Claims must be independent of any document referred to in the description (Canada).

140. In conclusion of this comparative analysis, and as a principal remark, it could be said that the selected countries may be divided, in general terms, into two groups, as far as the manner of drafting claims is concerned: a first group of countries in which the provisions of the national laws and regulations are basically the same as or similar to those of the EPC or at least do not seem to contain any provisions contrary to those of the EPC; and a second group of countries, together with the PCT and the PCT Regulations, which differ substantially from the provisions of the EPC with respect to multiple dependency.

IV. Arguments in Favor of a Uniform Solution

141. It is clearly in the interest of the users of the industrial property system to have a wide and far-reaching harmonization of the rules and requirements concerning the manner of claiming.

142. A treaty which would deal with the harmonization of the manner of claiming should be based on relatively liberal principles in the sense that applicants should, on the one hand, have clear principles concerning the structure of claims and possible dependencies of claims but, on the other hand, should not have to comply with too strict requirements and should dispose of enough flexibility to choose the manner of claiming which they consider to be most appropriate. A harmonization on that basis would greatly facilitate the drafting and reading of claims. The uniform principles should permit to concentrate on the gist of the invention, and the effect of the uniform principles should be that they reduce considerably the number of claims to be scrutinized and that they make clear the relationship between the contents of the different claims. Such principles would not only be of benefit to applicants but also to third parties who have to evaluate patents in order to avoid infringement.

V. Principles of a Solution

143. The principles of a solution to be embodied in an international treaty and in regulations under that treaty could be drafted as follows:

Treaty

Article 104

"(1) An application shall contain one or more claims. The claim or claims shall define the matter for which protection is sought. The claim or claims shall be clear and concise, and shall be supported by the description.

"(2) The definition of the matter for which protection is sought shall be in terms of the technical features of the invention."

Regulations under the Treaty

Rule relating to Article 104

"(1) If there are several claims, they shall be numbered consecutively in arabic numerals.

"(2)(a) Whenever appropriate, claims may contain:

(i) a statement indicating those technical features of the invention which are necessary for the definition of the claimed subject matter, whether or not those features are part of the prior art;

(ii) a characterizing portion—preceded by the words 'characterized in that,' 'characterized by,' 'wherein the improvement comprises,' or any other words to the same effect—stating concisely the technical features which, in combination with the features stated under (i), it is desired to protect.

(b) The national law may prescribe that claims shall not, except where absolutely necessary, rely, in respect of the technical features of the invention, on references to the description or drawings, particularly not on such references as: 'as described in part ... of the description,' or 'as illustrated in figure ... of the drawings.'

(c) The claims shall not contain drawings but may contain chemical or mathematical formulae and/or, if desirable, tables.

(d) If the application contains drawings, the technical features mentioned in the claims shall preferably, if the intelligibility of the claim can thereby be increased, be followed by reference signs relating to those features and preferably placed between parentheses. Such reference signs shall not be construed as limiting the claim.

"(3) Any claim which does not include all the features of one or more other claims shall be referred to hereinafter as 'independent claim.' An independent claim may refer to one or more other claims.

"(4)(a) Any claim which includes all the features of one or more other claims shall be referred to hereinafter as 'dependent claim' or 'multiple dependent claim' depending on whether it refers to one or more other claims. It shall contain, if possible at the beginning, a reference to the other claim or claims and shall then state the additional features claimed.

(b) Dependent claims or multiple dependent claims may depend on independent claims, dependent claims or multiple dependent claims.

(c) A dependent claim shall be construed as including all the features contained in the claim to which it refers, and a multiple dependent claim shall be construed as including all the features contained in the claim or claims to which it refers and in relation to which it is considered.

(d) All dependent claims referring to a single other claim, and all multiple dependent claims referring to several other claims, shall be grouped together in the most practical way possible.

(e) A dependent claim or a multiple dependent claim may set forth features which in themselves constitute an invention.

"(5) Where any requirement prescribed in Article 104 or in this Rule is not complied with, the applicant shall be given an opportunity to amend the application, except where Article 101(2)(a)(i) applies and the application does not contain any part which, on the face of it, appears to be a claim or claims."

144. With respect to the requirement of unity of invention, referred to in several occasions in this document, for instance in paragraph 143, above (Article 104(1)(b)), attention is drawn to the special study contained in document HL/CE/III/2 Supp. 2 (see below).

ANNEX

Comparison of Claim Series in EPO and USA*

The following items 1, 2 and 3 are mandatory in USA (and PCT) filings. In EPO filings, item 1 is mandatory, item 2 is desirable for clarity, but item 3 is not mandatory.

1. A claim which includes all the features of one or more other claims shall do so by reference to the other claim or claims and shall then state the additional features claimed—such claims are dependent claims.

2. A dependent claim which refers to more than one other claim (multiple dependent claim) shall refer to such claims in the alternative.

3. Multiple dependent claims shall not serve as a basis for any other multiple dependent claim.

On this basis, the following are series of claims for EPO and USA in respect of a process, the main feature of which is A to which subsidiary features B, C, D, E and F can be added singly or in any combination.

<i>EPO Claims</i>	<i>Combination Covered</i>	<i>USA Claims</i>
Claim 1 A process of A	A	Claim 1 A process of A
Claim 2 A process as claimed in claim 1+B	A+B	Claim 2 A process as claimed in claim 1+B
Claim 3 A process as claimed in claim 1 or 2+C	A+C	Claim 3 A process as claimed in claim 1 or 2+C
	A+B+C	
Claim 4 A process as claimed in claim 1, 2 or 3+D	A+D	Claim 4 A process as claimed in claim 1 or 2+D
	A+B+D	
	A+C+D	Claim 5 A process as claimed in claim 3+D
	A+B+C+D	
	A+E	Claim 6 A process as claimed in claim 1 or 2+E
	A+B+E	
	A+C+E	Claim 7 A process as claimed in claim 3+E
Claim 5 A process as claimed in claim 1, 2, 3 or 4+E	A+B+C+E	
	A+D+E	Claim 8 A process as claimed in claim 4+E
	A+B+D+E	
	A+C+D+E	Claim 9 A process as claimed in claim 5+E
	A+B+C+D+E	
	A+F	Claim 10 A process as claimed in claim 1 or 2+F
	A+B+F	
	A+C+F	Claim 11 A process as claimed in claim 3+F
	A+B+C+F	
	A+D+F	Claim 12 A process as claimed in claim 4+F
	A+B+D+F	
	A+C+D+F	Claim 13 A process as claimed in claim 5+F
Claim 6 A process as claimed in claim 1, 2, 3, 4 or 5+F	A+B+C+D+F	
	A+E+F	Claim 14 A process as claimed in claim 6+F
	A+B+E+F	
	A+C+E+F	Claim 15 A process as claimed in claim 7+F
	A+B+C+E+F	
	A+D+E+F	Claim 16 A process as claimed in claim 8+F
	A+B+D+E+F	
	A+C+D+E+F	Claim 17 A process as claimed in claim 9+F
	A+B+C+D+E+F	

* This comparison has been established by Mr. Donald Vincent (United Kingdom) and WIPO expresses its gratitude to him for permitting its reproduction in this document.

II. REQUIREMENTS IN RESPECT OF UNITY OF INVENTION IN PATENT APPLICATIONS

(HL/CE/III/2 Supp. 2)

Memorandum by the International Bureau of WIPO

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I. Introduction

1. In most countries having a patent law, the applicant for the grant of a patent has to meet the requirement of "unity of invention," i.e., the requirement that a patent application can relate to one single invention only.

2. Normally, this requirement is laid down in the patent law, but some countries provide for it in the regulations or in other legal texts (e.g., ordinances, decrees, administrative instructions) which are legally binding on patent applicants.

II. Purpose of the Memorandum

3. The purpose of this memorandum* is to examine the existing requirements and the possibility of finding a uniform solution which could easily be applied by national and regional industrial property offices and which would have the advantage for applicants that they do not have to comply with different requirements as to unity of invention if they seek protection for the same invention in several countries. The uniform solution would also be of benefit to third parties who have to examine patents with a view to any potential infringement and to those who want to study patent documents as a source of technical information. One would have to study, at a later stage, whether such a uniform solution, which would be expressed in treaty provisions supplemented by regulations—which, by their nature, cannot regulate the matter in all its details—should not be supplemented by a set of guidelines aiming at achieving a uniform application of those provisions.

4. The solutions to be proposed for adoption should be the same for the largest possible number of countries. In this connection, reference is made to the significant achievements

* Prepared by the International with the help of Mr. A. Hüni (Switzerland) and Mr. A.T. Puister (Netherlands) as consultants.

in respect of the harmonization of certain provisions of patent law already obtained as a consequence of the Patent Cooperation Treaty (PCT) (1970) and the European Patent Convention (1973).

III. Existing Legislative Provisions

A. Information Used in the Present Memorandum

5. Before proposing any uniform solution, it may be useful to examine the requirements under existing laws in respect of the unity of invention. For this purpose, the following information has been taken into account:

(i) the provisions of the Patent Cooperation Treaty (PCT);

(ii) the provisions of the European Patent Convention (EPC);

(iii) the provisions of the legislation (laws, regulations, etc.) of those eight countries in or for which, according to the statistics published by WIPO (IP/STAT/1983/B), more than 10,000 titles of protection for inventions were granted in 1983. Those countries are Canada (20,999), France (25,043), Germany (Federal Republic of) (20,913), Japan (54,701), the Soviet Union (74,200), Switzerland (11,768), the United Kingdom (28,254) and the United States of America (56,862). The figures indicate the number of patents granted in 1983, except in the case of the Soviet Union, where they represent the total of the number of patents and inventors' certificates granted in said year.

6. In general, the present memorandum is based on legislative provisions (treaties, laws, regulations, etc.) and does not take into account the interpretation given to the said provisions by courts and industrial property offices or the practice of industrial property offices. The present memorandum only presents a short summary of the said provisions; the summaries have not been verified by the industrial property offices concerned.

B. The Patent Cooperation Treaty (PCT)

7. Article 3(4)(iii) of the PCT provides that the international application must comply with the prescribed requirement of unity of invention. That requirement is defined in Rule 13.1 of the Regulations under the PCT, which provides that the "international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ('requirement of unity of invention')." Furthermore, Rule 13.2 provides that this requirement of unity of invention is in particular complied with in all cases where the following types of claims of different categories are combined:

"(i) in addition to an independent claim for a given product, the inclusion in the same international application of an independent claim for a process specially adapted for the manufacture of the said product, and the inclusion in the same international application of an independent claim for a use of the said product, or

"(ii) in addition to an independent claim for a given process, the inclusion in the same international application of an independent claim for an apparatus or means specifically designed for carrying out the said process, or

"(iii) in addition to an independent claim for a given product, the inclusion in the same international application of an independent claim for a process specially adapted for the manufacture of the product, and the inclusion in the same international application of an independent claim for an apparatus or means specifically designed for carrying out the process."

8. Subject to the requirement of unity of invention, it is also permitted to include in the same international application two or more independent claims of the same category (i.e., for product, process, apparatus, or use) which cannot readily be covered by a single generic claim (Rule 13.3).

9. Subject to the requirement of unity of invention, it is furthermore permitted to include in the same international application a reasonable number of dependent claims, claiming specific forms of the invention claimed in an independent claim, even where the features of any dependent claim could be considered as constituting in themselves an invention (Rule 13.4).

C. The European Patent Convention (EPC)

10. Article 82 of the EPC expresses the same requirement as PCT Rule 13.1 with respect to the requirement of unity of invention (see paragraph 7, above).

11. Furthermore, Rule 30 of the Implementing Regulations to the EPC, which has the same contents as PCT Rule 13.2, permits in particular one and the same European patent application to include the combinations of independent claims of different categories as mentioned for the PCT in paragraph 7(i), (ii) and (iii), above.

12. Like in the PCT, subject to the requirement of unity of invention, the Implementing Regulations to the EPC (Rule 29) allow a single European patent application to contain two or more independent claims in the same category (product, process, apparatus, or use) where it is not appropriate, having regard to the subject matter of the application, to cover this subject matter by a single claim; furthermore, any claim stating the essential features of an invention may be followed by one or more claims concerning particular embodiments of that invention (dependent claims). A dependent claim may contain an independent invention (*Guidelines for Examination in the European Patent Office*, Part C, Chapter III, 7.8).

D. National Legislation

13. *Canada*. According to Section 38 of the Patent Act, 1952, as amended up to 1972, a "patent shall be granted for one invention only but in an action or other proceeding a patent shall not be deemed to be invalid by reason only that it has been granted for more than one invention."

14. Also here the Rules (Sections 58 and 59 of the Patent Rules) give further details, namely: an application that claims a product and a process for making the product or an application that describes and claims a process and an apparatus especially adapted to carry out the process shall not, for that reason only, be deemed to be directed to more than one invention.

15. *France*. Here the requirement of unity of invention is expressed in Section 14 of the Patent Law of 1968, as last amended and supplemented in 1984, which states that the patent application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept.

16. Additional regulations are to be found in Sections 11 and 12 of the Decree on Applications for Patents and Utility Certificates and the Grant and Maintenance in Force of Such Titles, as last amended in 1982, which follow almost literally the EPC Implementing Regulations (see paragraphs 11 and 12, above).

17. *Germany (Federal Republic of)*. The Patent Law of 1981 briefly states (Section 35(1), second sentence) that for "every invention, a separate application shall be required." In actual practice, however, a plurality of claims are allowed, either of one and the same category or of different categories.

18. *Japan*. "A patent application shall relate to a single invention" under Section 38 of the Patent Law of 1959, as last amended in 1985. The same provision, however, specifies that the requirement of unity of invention is also complied with where the following inventions have the relationship indicated below with a first invention ("the specified invention") in the application:

"(i) inventions which have, as a substantial part of their indispensable constituent features, the whole or a substantial part of the indispensable constituent features of the specified invention and which have the same purpose as the specified invention;

"(ii) where the specified invention relates to a product, inventions of processes for manufacturing the product, inventions of processes of using the product, inventions of machines, instruments, equipment or other devices for manufacturing the product, or inventions of products solely utilizing the specific properties of the product;

"(iii) where the specified invention relates to a process, inventions of machines, instruments, equipment or other devices used directly in the working of the specified invention."

19. *Soviet Union*. The requirement of unity of invention is laid down in the Law (Section 45 of the Statute on Discoveries, Inventions and Rationalization Proposals of 1973, as amended in 1978) using the same wording as PCT Rule 13.1 (see paragraph 7, above).

20. The implementing instructions show a more liberal attitude than the law would suggest, in that under certain circumstances two or more inventions related to different objects can be combined (e.g., a device, method, substance); in such a case, a single title—an inventor's certificate or patent—is issued with the denomination of the invention compiled in the following sequence: substance, method, device (Item 28 of the Instructions for the Drafting of Applications in Respect of Inventions, EZ-1-74, 1974).

21. *Switzerland*. A patent may contain several independent claims (for a process; or a product, a means for performing a process, or a device; or the application of a process; or the utilization of a product) where they define a group of inventions so linked as to form a single general inventive concept (Section 52 of the Federal Law on Patents for Inventions of 1954, as revised in 1976).

22. The conditions specified in Section 52 of the Law are deemed to have been met when the patent application contains one of the following combinations of independent claims (Section 30(1) of the Ordinance on Patents for Inventions):

"(a) in addition to a first claim for a process: a claim for a means of implementing that process, a claim for the product resulting therefrom, and a claim either for an application of the process or for a use of the product;

"(b) in addition to a first claim for a product: a claim for a process for the manufacture of that product, a claim for a means of implementing the process and a claim for the use of the product;

"(c) in addition to a first claim for a device: a claim for a process for the operation of the device and a claim for the manufacture of the device."

23. "Where a patent application contains another combination of independent claims, of the same category or of different categories, the overall idea common to both inventions defined therein shall be clearly apparent from the claims themselves" (Section 30(2) of the Ordinance on Patents for Inventions).

24. *United Kingdom.* The requirement of unity of invention is defined by providing that the claim or claims in one patent application must relate to one invention or to a group of inventions which are so linked as to form a single inventive concept (Section 14 of the Patents Act 1977).

25. The Rules further indicate what, in particular, is permitted in an application without violating the requirement of unity of invention, using the wording of the EPC Implementing Regulations (Rule 22 of the Patent Rules 1982, as last amended in 1985) (see paragraphs 11 and 12, above).

26. *United States of America.* The patent law states that if two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions (Section 121 of the United States Code, Title 35 (Patents) (35 USC)). In respect of international applications filed under the PCT which designate, but do not originate in, the United States of America, the determination of unity of invention is governed by a reference to the requirements of the PCT Regulations (Section 372(b)(2) of the United States Code, Title 35 (Patents) (35 USC)).

27. The patent regulations spell out, at length, what is allowed and what is not in respect of national applications:

"(a) Two or more independent and distinct inventions, that is, inventions which do not form a single general inventive concept, may not be claimed in one application, except that more than one species of an invention, not to exceed a reasonable number, may be specifically claimed in different claims in one application, provided the application also includes an allowable claim generic to all the claimed species and all the claims to species in excess of one are written in dependent form ... or otherwise include all the limitations of the generic claim.

"(b) A group of claims of different categories in an application so linked as to form a single inventive concept are considered to be one invention. In particular any of the following groupings of claims of different categories may be included in the same application:

(1) in addition to a claim for a given product,

(i) a claim for one process specially adapted for the manufacture of the said product, as where the process of making as claimed cannot be used to make other and materially different products;

(ii) a claim for one use of the said product, as where said use as claimed cannot be practiced with another materially different product; or

(iii) both (b)(1)(i) and (ii);

(2) in addition to a claim for a given process, a claim for one apparatus or means specifically designed for carrying out of the said process, that is, it cannot be used to practice another materially different process.

"(c) If the situation of paragraph (b)(1) of this section exists where claims to all three categories, product, process and use, are included, and the product claims are not allowable, the use and process claims are not so linked as to form a single general inventive concept. Where the process and use claims are not so joined by an allowable linking product claim, the applicant will be required to elect either the use or the process for prosecution with the product

claim." (Section 1.141 of the Code of Federal Regulations, Title 37 (Patents, Trademarks and Copyrights) (37 CFR))

E. Comparative Analysis

28. In this analysis, a comparison will be made of the legal provisions and regulations valid under the two treaties and in the eight countries considered. In this comparison, no distinction will be made as to whether a binding rule emanates from the law or from regulations.

29. The analysis will start with a consideration of the general principle and will be followed by a more detailed analysis of the following three topics which would seem to constitute the problem areas:

(i) claims of different categories (paragraphs 36 to 40, below);

(ii) claims of one and the same category (paragraphs 41 to 48, below);

(iii) dependent claims (paragraphs 49 to 52, below).

30. The importance of these three topics is also clearly demonstrated by the fact that both the PCT and the EPC, as well as the laws of the eight countries considered, have dedicated much attention to them.

31. *General Principle.* The essence of the requirement of unity of invention, as such, is that a patent application should claim only one invention or a group of inventions linked by a general inventive concept. The difficult question that arises is what actually constitutes "one invention" or a "general inventive concept."

32. The PCT, the EPC and the legislation of the eight countries all have a general requirement of unity of invention of the nature stated above. The treaties and the legislation establish that general principle and then normally provide for rules and guidelines as to how such principle should be interpreted, construed and applied.

33. Despite all the differences which exist, it seems to be clear that, although the wording of the relevant provisions may differ, a patent application need not, speaking in the numerical sense, relate to "one" invention only but may cover several "inventions" or "objects" that are "linked," "related" or "interdependent." In other words, for the purposes of the requirement of unity of invention, the emphasis is on the term "unity" rather than on "invention." A patent application must relate to a single general (i.e., unified) inventive concept, which may or may not be composed of several inventions each requiring its own category of claim.

34. Hence the efforts made already, both at the international and national levels, on making it clear which types of claims and combinations of claims are allowed. Since both the PCT and the EPC have the same requirements, these will be used as a starting point and a point of reference against which the rules of the other countries will be examined with respect to the three items mentioned in paragraph 29, above.

35. This way of comparing the different legislations offers the additional advantage that four of the eight countries considered (France, Germany (Federal Republic of), Switzerland, United Kingdom), which are parties to both the PCT and the EPC and have their national legislation and practice in line with those treaties and their regulations, or are, as in the case of Switzerland, more liberal, do not need any separate comments and can be considered to have been discussed together with the PCT/EPC.

36. *Claims of Different Categories.* There are basically four different categories of claims, namely, (i) the category of a claim for a product, (ii) the category of a claim for a process, (iii) the category of a claim for a use and (iv) the category of a claim for a means. Since a means can be used for carrying out a process or for carrying out a use of a product, those four categories may lead to five independent claims (e.g., a claim for a new dough, a claim for a process for baking said dough, a claim for the use of said dough for making pastry, a claim for an oven suitable for baking said dough, and a claim for a special utensil to be applied for the use of said dough for making said pastry). Those five independent claims will be identified below by the following letters: A (claim for a product), B (claim for a process for the manufacture of the product), C (claim for a use of the product), D (claim for a means for carrying out the process) and E (claim for a means for carrying out the said use). In D and E, the word "means" has been used rather than the word "apparatus" because the former is broader than, and covers, the latter.

37. Among the laws and treaties considered, only the Japanese and Swiss laws mention explicitly the possibility of including the four categories of independent claims, as referred to in the preceding paragraph, in one application. The PCT and the EPC mention explicitly three combinations of independent claims, two of which comprise a maximum of three independent claims of different categories, namely, the combination "product + process + use" (A + B + C) and the combination "product + process + means for carrying out the process" (A + B + D).

38. As to the laws of the non-EPC countries other than Japan (Canada, Soviet Union, United States of America), the law of the Soviet Union follows the PCT, whereas the laws of Canada and the United States of America seem to have stricter requirements than those provided for in the PCT. Canada specifically mentions only the combination "product + process" (A + B) and the combination "process + means for carrying out the process" (B + D) as fulfilling the requirement of unity of invention, whereas the United States of America does not consider the combination "product + process + means for carrying out the process" (A + B + D) as fulfilling *per se* the said requirement despite the fact that the PCT expressly mentions such combination (see the preceding paragraph) which, therefore, should be allowed at least in international applications (both for the purposes of international search and for the purposes of the national phase of the PCT procedure).

39. Although the above picture—somewhat oversimplified—looks rather simple, the actual situation is not quite so simple. This is due to the fact that both the PCT and the EPC prescribe "minimum" rules. More may be allowed, and the laws of some countries do so, as has been stated. However, other countries interpret the minimum rules in a restrictive way. It is therefore obvious that it is highly desirable to try to reach a uniform system allowing, *expressis verbis*, as fulfilling the requirement of unity of invention, a combination of independent claims of all the four categories (product + process + use + means for carrying out the process). In addition, an independent claim for a means for carrying out a given use may also be included as long as there is a single general inventive concept. As stated in paragraph 36, above, a combination of up to five independent claims (A + B + C + D + E) may have to be allowed. Needless to say, if less is wanted, applicants are free to claim less.

40. Although, for the sake of easier reading, some shorthand expressions like "for the manufacture of the product" or "for carrying out the process" were used in paragraphs 36 to 38, above, it has to be remembered that, in the pertinent (PCT and

EPC) rules on permitted combinations, the qualifications "specially adapted" or "specifically designed" appear. These words have caused some confusion since they are interpreted differently in various industrial property offices. Thus, according to the practice in the United States of America (37 CFR 1.141), as interpreted by the United States Patent and Trademark Office, a process is specially adapted to the manufacture of a given product only if, on the one hand, the process is an obvious process of making the product and cannot be used to make other and different products and, on the other hand, the product cannot be made by another process (Paragraph 806.05(f) of the *Manual of Patent Examining Procedure* (MPEP)). In the practice of the European Patent Office, it seems to be sufficient if the product is the result of the process. The words "specially adapted" only imply that the claim for the process specifies technical features which result in the production of the product. The same holds true for the requirements set forth in MPEP, Paragraph 806.05(g), with respect to the relation between "apparatus" and "product made" by the apparatus. The requirement that the product cannot be produced by any other process is not contained in PCT Rule 13.2. Since, moreover, no other country interprets the said PCT Rule in this way, and in order to avoid such different interpretations, it is suggested to delete these qualifications.

41. *Claims of One and the Same Category.* Paragraphs 36 to 40, above, dealt with claims of different categories, namely claims for a product, a process, a use or a means. The claim of any of those categories which appears first in the application is normally an independent claim in that it does not refer back to any other claim.

42. It is possible that an invention, or a group of inventions so linked as to form a single general inventive concept, is of such a nature that it cannot be covered by one single (independent) claim of any of these four categories.

43. An example of such a situation is an invention relating to a new compound which can polymerize to give a new plastic. In such a case, there is a clear justification and need for two independent product claims, namely: (1) a claim for the new compound *per se* and (2) a claim for the new plastic *per se*.

44. To these claims, can of course be added independent process claims (1) for making the new compound and (2) for making the new plastic from the new compound, without violating the requirement of unity of invention.

45. An independent claim for the use of the new plastic as well as an independent claim for a means for carrying out either or both of the processes claimed further constitute inventions so linked with the other(s) as to form a "single inventive concept."

46. It is clear that such claims of the same category, for example, for the new compound *per se* and for the plastic *per se*, cannot be covered under the umbrella of one single claim covering them both (such an umbrella is usually referred to as a "generic claim"). They must remain separate, but their combination in one patent application complies with the requirement of a "single inventive concept."

47. Those cases of claims of the same category have already been recognized and are in fact allowed by PCT Rule 13.3 (see paragraph 8, above), by the EPC Implementing Regulations and by the regulations of the countries party to the EPC. Also Canada, Japan and the United States of America accept this.

48. In addition to the examples given in paragraphs 43 to 45, above, there are other typical combinations of independent

claims of one and the same category which can satisfy the "single inventive concept." Examples of such combinations are: claims for inventions one of which has, as a substantial part of its features, all or a substantial part of the features of the other and serves the same purpose (Law of Japan, Section 38; see paragraph 18, above) (for example, a cutting machine, and a particular form of the blade of the knife used in it); or a claim for a product in combination with a claim for another product solely utilizing the specific properties of said product (Law of Japan, Section 38; see paragraph 18, above) (for example, an insecticidal compound as such, and a product comprising said insecticidal compound in combination with diluent material, which combination is the ready-for-use form in which the insecticide is normally used); or a claim for a product serving as a starting material to produce another product covered by another claim, provided the former product imparts distinguishing features to the latter product (although such a case is not expressly covered by any treaty or law analyzed in this memorandum, it is allowed in the practice of at least the European Patent Office) (for example, a new compound suitable as a starting material for making a new plastic, and that new plastic); or claims for separate products which are interrelated or interdependent and are to be used together (for example, a lock and its key, a weapon and its ammunition, a transmitter and a receiver for a special coded signal, or a special data carrier and a related reading device).

49. *Dependent Claims.* So far, only the so-called "independent claims" have been discussed, namely: the claims of different categories (paragraphs 36 to 40, above) and the claims of one and the same category (paragraphs 41 to 48, above). They are related, since they all go back to one single inventive concept, but they do not refer back, in a subordinate way, to any other claim; they are all, so to speak, of the same rank, hence the term "independent claims." The claims to be studied in the following paragraphs are what one might call subordinate ones, in that they refer, for technical details, back to at least one other claim on which they depend; they are therefore called "dependent claims."

50. Dependent claims are—by their very nature, since they incorporate all the features of the independent claim they refer to—claims for the same invention as that claimed in the independent claim. They are more specific embodiments thereof (for example, if there is an independent claim for a new method for making cast iron, a specific embodiment could be to make said cast iron according to said new method at a temperature within a certain range; in that case, a dependent claim could be drafted for that temperature range). Even if any of their specific features could be considered an invention in itself, still the "single inventive concept" applies. Also, if a dependent claim spells out an additional limiting feature, not expressly referred to in the independent claim, this does not mean that such dependent claim would be for another invention or would not satisfy the "single inventive concept" (for example, if, in the above example of the new method for making cast iron, no reference to temperatures would have been made in the main claim, a dependent claim on said temperature range would nevertheless be permitted).

51. The PCT, the EPC, and the legislation of all the eight countries considered allow dependent claims. As explained above, dependent claims are by definition for the same invention as the independent claim(s) they refer to. They therefore should not present a problem within the context of the requirement of unity of invention.

52. The formal requirements with regard to dependent claims are not considered here, as they are dealt with in document HL/CE/III/2 Supp.1 (see above).

IV. Arguments Against and in Favor of a Uniform Solution

53. The treaties and laws studied reflect a general acceptance of a requirement of unity of invention and a relative consensus as to the meaning of the principle as such. The ambiguities and discrepancies seem to arise when one begins to compare the practice of the industrial property offices. The question, therefore, presents itself whether a uniform international approach and standard for the application of the requirement of unity of invention would be desirable.

54. It is, indeed, well known to the practitioner that there are considerable differences in the interpretation of the "single inventive concept," even under the rules of the PCT, for permissible combinations of claims. Not only do those differences exist amongst the various patent granting authorities but sometimes also amongst individual examiners within one and the same industrial property office. Such different interpretations concern, for example, the combination of independent claims for a composition of products and a constituent part of that composition (for example, the insecticidal compound and the composition containing it together with a diluant; see paragraph 48, above), or for an apparatus and a part thereof, or for a starting material and the final product (for example, the compound and the plastic referred to in paragraph 48, above). Such combinations seem to be usually allowed by the European Patent Office but less often by the United States Patent and Trademark Office. Furthermore, the latter Office is interpreting the possibility of combining claims of different categories, as given under the PCT (see paragraph 40, above), in a different way from other industrial property offices such as the European Patent Office. This just illustrates the discrepancies existing even between systems aligned to the PCT.

55. Therefore, a uniform solution is obviously desirable.

A. Arguments Against

56. The principal reasons for providing for a requirement of unity of invention are fiscal (to prevent applicants from obtaining protection for several inventions by paying a single set of patent fees) and technical (to facilitate search and classification). Some patent offices fear financial losses and complications for search and examination if they have to apply more liberal rules and are of the opinion that a financial loss, if any, which a patent office might suffer as a result of a harmonized rule on unity of invention could lead to a general increase of certain fees. Furthermore, since the application of the requirement of unity of invention is rather technical and depends on objective as well as subjective criteria, it is difficult to arrive at uniformity. Hence, it could be argued that the requirement of unity of invention should be left to national legislation and practice, the more so as it is already difficult to apply it uniformly and consistently within one and the same industrial property office.

B. Arguments in Favor

57. From an international point of view, that is, if an applicant files patent applications for the same invention in several countries and under the PCT or the EPC, the complications that the lack of uniformity in the interpretation and application of the requirement of unity of invention presents to him as the user of the patent system, but also to the offices involved, are obvious.

58. Given the diversity in the approach, standards and terminology of the relevant legislative and treaty provisions, and given also the differences in the practical application of the

general principle of unity of invention, it is already difficult to determine how the requirement is applied under any given law or treaty. Nevertheless, the applicant must draft his application, in particular his claims, in a different manner for each country (and/or under each treaty) where—in respect to his given application—the law or only the actual practice differs in this respect.

59. Furthermore, those interested in obtaining information on corresponding patent applications filed in different countries for the same invention or group of inventions may find such information of limited use or complicated to evaluate if the corresponding applications do not cover the invention or group of inventions in the same way and to the same extent, simply because the countries where they were filed interpreted and applied the requirement of unity of invention in different ways. Moreover, it is important to ensure to the greatest possible extent that all members of a patent family comprise the complete disclosure of all inventions combined in the original application. More and more search files contain only one member of a patent family (in order to reduce the volume of paper and avoid duplication). In addition, more and more references are made to patent family members for language reasons (in order to have an easier access to the technical content of a document cited if it cannot be readily understood without a translation).

60. Public interest favors that patent protection relating to one invention or to one single inventive concept be embodied in one patent. A tendency to require division of applications would increase the number of patents and thus create an additional burden on the public at large. On the other hand, it is to be noted that Article 4G(2) of the Paris Convention for the Protection of Industrial Property allows the voluntary division of an application by the applicant.

61. From an international perspective, a uniform approach and standard for applying the requirement of unity of invention is highly desirable and advantageous, primarily for reasons of simplification and of standardization of the subject matter of claims permissible in a single application.

62. Harmonization is difficult at the international level and even at the national level, within the same office. One should therefore study the possibility to have basic provisions in a treaty, and to supplement them with regulations and in a set of guidelines which would give examples and aim at harmonization of the practical implementation of the treaty provisions. Such guidelines would be the subject of a separate study, to be conducted once the principles for a uniform solution are generally agreed upon.

V. Principles of a Solution

63. A uniform international standard could be formulated in an international treaty and in regulations under that treaty along the lines of the following principles:

Treaty

Article 105

“(1) An application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept (‘requirement of unity of invention’).

“(2) The requirement of unity of invention shall be construed as permitting the inclusion in the same application:

(i) of claims of different categories, to the extent prescribed in the Regulations;

(ii) of claims of the same category, to the extent prescribed in the Regulations;

(iii) of dependent claims and of multiple dependent claims, even where the features of a dependent claim or of a multiple dependent claim constitute in themselves an invention.

“(3) Failure to comply with the requirement of unity of invention shall not be a ground for invalidation or revocation of a patent.”

Regulations under the Treaty

Rule relating to Article 105

“(1) The requirement of unity of invention shall be deemed to be complied with where the following combinations of claims of different categories are included in the same application:

(i) the combination of an independent claim for a given product with:

(a) an independent claim for a process for, or also for, the manufacture of the said product (combination A + B);

(b) an independent claim for a use of the said product (combination A + C);

(c) an independent claim for a process for, or also for, the manufacture of the said product, and an independent claim for a use of the said product (combination A + B + C);

(d) an independent claim for a process for, or also for, the manufacture of the said product, and an independent claim for a means for, or also for, carrying out the said process (combination A + B + D);

(e) an independent claim for a process for, or also for, the manufacture of the said product, an independent claim for a means for, or also for, carrying out the said process, and an independent claim for a use of the said product (combination A + B + D + C);

(ii) the combination of an independent claim for a given process with an independent claim for a means for, or also for, carrying out the said process (combination B + D).

“(2) If the requirement of unity of invention is complied with in a given case, the following combinations, in particular, of claims of different categories can be included in the same application:

(i) the combination of an independent claim for a given product with:

(a) an independent claim for a use of the said product, and an independent claim for a means for, or also for, carrying out the said use (combination A + C + E);

(b) an independent claim for a process for, or also for, the manufacture of the said product, an independent claim for a use of the said product, and an independent claim for a means for, or also for, carrying out the said use (combination A + B + C + E);

(c) an independent claim for a process for, or also for, the manufacture of the said product, an independent claim for a means for, or also for, carrying out the said process, an independent claim for a use of the said product, and an independent claim for a means for, or also for, carrying out the said use (combination A + B + D + C + E);

(ii) the combination of an independent claim for a use of a product with an independent claim for a means for, or also for, carrying out the said use (combination C + E).

“(3) The order in which the claims appear in any of the combinations referred to in paragraph (1) or paragraph (2)

may be different from the order used in those paragraphs.

"(4) If the requirement of unity of invention is complied with in a given case, claims of the same category can be included in the same application.

"(5) Guidelines in respect of the requirement of unity of invention shall be laid down in Guidelines Concerning Unity of Invention."

* * *

III. PRIOR ART EFFECT OF PREVIOUSLY FILED BUT YET UNPUBLISHED PATENT APPLICATIONS

(HL/CE/III/2 Supp.3)

Memorandum by the International Bureau of WIPO

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I. Introduction

1. It is generally recognized that patents¹ are granted only for inventions that are new and involve an inventive step. An invention is considered new if it does not form part of the state of the art; it is considered to involve an inventive step if, having regard to the state of the art, it would not have been obvious to a person having ordinary skill in the art. In other words, the novelty and inventive step of an invention are determined with respect to what is comprised in the state of the art.

2. As a general rule, the state of the art consists of everything disclosed to the public before a specified date. This date is, under the laws of the overwhelming majority of countries, the filing date or (where applicable) the priority date of the application claiming the invention under examination. However, with respect to certain elements of the state of the art, under the laws of three countries (Canada, Philippines, United States of America), this date is the date of the invention.

¹ In this memorandum, "patents" is meant to include patents for invention as well as inventors' certificates (see Article 2(i) of the draft Treaty contained in document HL/CE/III/2, which is not reproduced here).

3. Thus, establishing what elements form part of the state of the art is essential in determining the patentability (novelty and inventive step) of an invention. Consequently, modern patent laws usually define expressly what matter is to be included in the state of the art and determine the relevant date for such inclusion.

4. This memorandum deals with one possible element of the state of the art, namely, the contents of patent applications which benefit from a filing or a priority date that is earlier, and which are published later, than the filing or priority date of the patent application under examination. Such patent applications will be referred to hereinafter as "previously filed but yet unpublished patent applications."

5. Normally, the state of the art is comprised of anything published in printed form or otherwise disclosed to the public, orally or by use, as of the date the information is made available to the public. Moreover, under many modern laws, the state of the art also comprises the contents (or, depending on the particular law, only the claims) of patent applications whose filing or, if applicable, priority date is earlier than the filing or, where applicable, priority date of the application under examination (or, depending on the particular law, is earlier than the date of invention of the invention therein claimed), on the condition, however—and this is essential—that the contents of the former application are published² subsequently, either as such (i.e., as an application) or in the form of a granted patent. Another way of stating this rule is that, for purposes of determining what constitutes the state of the art, published applications (or patents) are antedated to a date that is earlier than their actual date of publication (i.e., the filing or, if applicable, priority date). With the exception of the German Democratic Republic and the United States of America, the laws of the countries covered by this memorandum which provide for the prior art effect of previously filed but yet unpublished applications apply this effect only for purposes of evaluating novelty, but not in respect of inventive step because the requirement of inventive step is considered to be too demanding in relation to the contents of not yet published patent applications which normally are not known to an inventor.

6. The principal question examined in this memorandum is whether, under any given law, the contents of previously filed but yet unpublished patent applications are considered to form part of the state of the art and, if so, on which date the contents of patent applications enter the state of the art. Depending on the particular law, this can be their actual filing date in the country, regardless of whether or not the application has an earlier priority date; or it can be their priority date, if applicable. The effect that the contents of a previously filed but yet unpublished patent application enter the state of the art is called "prior art effect" of the application. The term "prior art" is used, under the Patent Cooperation Treaty (PCT) and some national laws, as synonymous with "state of the art" and is used in this memorandum except where legislative texts use the term "state of the art."

7. Two further questions are also examined in this memorandum with respect to which the laws show some disparity: whether the whole contents, or only the claims, of previously filed but yet unpublished patent applications are taken into

² "Published" is understood in this memorandum as made available to the public by reason of an official act of the industrial property office whereby the application is made available to the public, whether that be prior to or by reason of the grant of a patent on that application and whether the public access to the application or the patent was achieved by a printed publication or through laying it open for public inspection.

account as prior art; and whether they are to be taken into account only in respect of determining novelty or also inventive step. The solution of only taking into account the claims hereinafter is, following the usual terminology, referred to as "prior claim approach."

II. Purpose of the Memorandum

8. The purpose of this memorandum is to examine the existing provisions, under the laws of certain selected countries and under the Patent Cooperation Treaty (PCT) and the European Patent Convention (EPC), in respect of the prior art effect of previously filed but yet unpublished patent applications. The memorandum compares the relevant provisions and points out some of the problems that arise as a result of differences among the national laws and the PCT and the EPC in this regard, particularly at the international level. Finally, it explores the possibility of finding a uniform solution to the question, which could easily be applied by national and regional industrial property offices and which would have the advantage that patent applicants would no longer be confronted with different rules regarding the prior art effect of previously filed but yet unpublished patent applications.

III. Existing Legislative Provisions

A. Information Used in the Present Memorandum

9. Before exploring any uniform solutions, the existing rules concerning the prior art effect of previously filed but yet unpublished patent applications will be examined. While recognizing that rules may be found in the legislation of a great number of countries, the present memorandum, in view of the great amount of material involved, covers only the laws of some of them, selected on the basis of statistical criteria. Thus, the following information has been taken into account:

(i) the provisions of the Patent Cooperation Treaty (PCT);

(ii) the provisions of the European Patent Convention (EPC) and of the legislation of those 18 countries in which or for which, according to the statistics published by WIPO (IP/STAT/1984/A), more than 4,000 titles of protection for inventions were granted in 1984. Those countries are Australia (7,252), Austria (8,565), Brazil (4,887), Canada (20,545), Czechoslovakia (6,601), France (23,666), German Democratic Republic (11,544), Germany (Federal Republic of) (21,758), Greece (9,153), Japan (61,800), the Netherlands (10,257), Poland (4,185), the Soviet Union (62,907), Spain (8,213), Sweden (11,670), Switzerland (13,977), the United Kingdom (18,867) and the United States of America (67,201). The figures in parenthesis following the names of all States except the Soviet Union indicate the number of patents granted in 1984; the figure concerning the Soviet Union represents the total number of patents and of inventors' certificates granted in 1984.

10. The present memorandum is mainly based on legislative provisions (treaties, laws, regulations, etc.). Unless otherwise indicated, such as in the case of the United States of America where it is difficult to understand the question under examination without considering applicable court decisions, the present memorandum does not take into account the interpretation given to legislative provisions by courts and industrial property offices or the practice of industrial property offices. The present memorandum only presents a short summary of the said provisions.

B. The Patent Cooperation Treaty (PCT)

11. Under the PCT, each international application filed pursuant thereto is subject to what is called an "international search," which results in an "international search report." The objective of an international search is to discover "relevant prior art," namely, prior art which may affect the patentability of the invention claimed in the international application (Article 15). Rule 33.1 of the Regulations under the PCT defines what constitutes relevant prior art for the purposes of international search and, in addition, in paragraph (c), provides that any published application or any patent whose publication date is later but whose filing date, or, where applicable, claimed priority date, is earlier than the international filing date of the international application searched, and which would constitute relevant prior art for the purposes of the international search had it been published prior to the international filing date, must be specially mentioned in the international search report. It should be noted that Rule 33.1(c) does not as such define previously filed but yet unpublished applications as prior art; it just states that such applications must be mentioned in the international search report.

12. In general, the applicant of an international application under the PCT can request an "international preliminary examination report," which gives an opinion on the questions whether the claimed invention appears to be novel, to involve an inventive step and to be industrially applicable; for such purposes, a claimed invention is considered novel if it is not anticipated by the prior art, and the prior art has to be taken into account for the evaluation of the inventive step (Articles 31, 33 and 35 PCT). In this connection, Rule 64.1 of the Regulations under the PCT contains a definition of prior art. Furthermore, Rule 64.3 provides that, in cases where any application or any patent which would constitute prior art had it been published prior to the filing or priority date of the international application under examination was published, as such, after that date but was filed earlier than such date or claimed the priority of an earlier application which had been filed prior to such date, such published application or patent is not to be considered part of the prior art; nevertheless, the international preliminary examination report must call attention to such application or patent.

13. On the basis of the international search report and, where applicable, the international preliminary examination report, the national offices then apply the standards of their respective national laws in order to determine the patentability of the invention claimed in the international application. The PCT does not, however, impose on the Contracting States what those standards should be. In fact, the PCT expressly states that "... any Contracting State is free to apply, when determining the patentability of an invention claimed in an international application, the criteria of its national law in respect of prior art and other conditions of patentability not constituting requirements as to the form and contents of applications" (Article 27(5) PCT).

14. The PCT does, however, set certain requirements concerning the recognition of the international filing date. These requirements also concern the prior art effect of a previously filed but yet unpublished international application. Article 11(3) PCT provides that, subject to the reservation under Article 64(4), Contracting States must consider international applications which fulfill the requirements for granting an international filing date and thus are accorded such a date to have the effect of a regular national application in each designated State as of the international filing date, which date must be considered to be the actual filing date in each designated State.

15. However, Article 64(4) PCT provides for a possibility of a reservation, which reads as follows: "Any State whose national law provides for prior art effect of its patents as from a date before publication, but does not equate for prior art purposes the priority date claimed under the Paris Convention for the Protection of Industrial Property to the actual filing date in that State, may declare that the filing outside that State of an international application designating that State is not equated to an actual filing in that State for prior art purposes." Any State making such a declaration is, to that extent, not bound by the provisions of Article 11(3) PCT. The United States of America is the only PCT Contracting State which has made such a declaration.

C. European Patent Convention and National Legislation

16. *European Patent Convention (EPC)*. Pursuant to Article 54(3) EPC, in connection with Article 89, the content of European patent applications as filed, of which the priority dates are prior to the priority date of the European patent application under consideration, and which were published after that date, is comprised in the state of the art. However, according to Article 56 EPC, this provision does not apply in determining inventive step; it only applies in determining novelty. It is to be noted that Article 54(3) applies only insofar as a Contracting State is designated in respect of both applications (Article 54(4)). As regards international applications under the PCT, designating one or more Contracting States of the EPC with an indication of the wish to obtain a European patent, these are considered as comprised in the state of the art only if the conditions for entry into the national phase are fulfilled (i.e., the international applications must be submitted to the EPO in one of its official languages and the national fee must be paid to the EPO) (Article 158).

17. *Australia*. Section 100(1)(f) of the Patents Act of 1952, as amended up to 1982, provides that a patent may be revoked on the ground that the invention, so far as claimed in any claim of the complete specification, is subject of a valid claim of an earlier priority date contained in the complete specification of a standard patent or in the petty patent specification of a petty patent. Thus, there is no prior art effect of the whole contents of previously filed but yet unpublished patent applications but only the effect that a patent is not valid if it has been granted for what has been validly claimed in a prior application or in an application benefiting from an earlier priority date.

18. *Austria*. The Patents Act of 1970, as amended in 1984, provides in its Section 48(1) that a patent is to be declared null and void if the invention is the subject matter of a patent belonging to a prior applicant. Thus, there is no prior art effect of the whole contents of previously filed but yet unpublished patent applications but only a prior art effect of the claims of such applications.

19. *Brazil*. Section 6 of the Industrial Property Code of 1971 defines prior art as anything made available to the public, including the contents of patents in Brazil and abroad. There is no prior art effect of previously filed but yet unpublished patent applications. Section 55 only provides that a patent is null where the grant prejudices rights of third parties.

20. *Canada*. The Patent Act of 1952, as amended in 1972, does not contain any provision dealing with the prior art effect of previously filed but yet unpublished patent applications. Section 45 deals with conflicting patent applications in the situation where the claims of concurrent applications are so nearly identical that separate patents cannot be granted thereon but the subject matter of the claims would be patentable if examined with reference to the prior art. In such cases, the patent is to be granted to the "prior inventor."

According to Section 45, a conflict also exists when one or more claims of one application describe the invention disclosed in another pending application.

21. *Czechoslovakia*. The Law on Discoveries, Inventions, Rationalization Proposals and Industrial Designs of 1972 does not address the question of the prior art effect of previously filed but yet unpublished patent applications.

22. *France*. Sections 8(3) and 15(5) of the Patent Law of 1968, as last amended and supplemented in 1984, provide that the content of French patent applications and of European or international patent applications which designate France, as filed, of which the filing or priority dates are prior to the filing or priority date of the patent application under examination and which were published on or after that date, are considered as comprised in the state of the art. Such documents are not to be considered in deciding whether there has been an inventive step (Section 10).

23. *German Democratic Republic*. According to Section 5(2) of the Law of 1983 on the Legal Protection of Inventions (Patent Law), technical solutions are not regarded as new if, before the day of filing of the patent application, the same solution has already been the subject of a patent application filed with the Office of Inventions and Patents, which results in the grant of a patent. It appears that, according to the interpretation given to this provision, the whole contents of the previously filed application are to be considered as a bar to novelty and inventive step as from the filing date or, where priority is claimed, from the priority date.

24. *Germany (Federal Republic of)*. According to Section 3(2) of the Patent Law of 1981, the content of the following patent applications, which have an earlier priority and which were published only on or after the date relevant for the priority of the application under examination, are considered as comprised in the state of the art: (i) national applications, as originally filed with the German Patent Office; (ii) European applications, as originally filed with the competent authority, seeking protection in the Federal Republic of Germany, unless the European patent application is based on an international application under the PCT and the conditions for entry into the national phase before the EPO have not been fulfilled (see last sentence of paragraph 16, above); (iii) international applications under the PCT, as originally filed with the receiving Office, where the German Patent Office is a designated Office with respect to the application but only if the conditions for entry into the national phase are fulfilled (i.e., the application fee must be duly paid and, if the application is not in German, a translation into German must be filed) (Law on International Patent Treaties of 1976, Article III 8(3)). If the priority of an application is based on a claim of priority of an earlier application, those rules are only applicable to the extent that the contents of the application in question do not exceed the contents of the earlier application. The aforementioned documents are not to be considered in deciding whether there has been an inventive step (Section 4).

25. *Greece*. The Law on Patents of Inventions of 1920 does not provide for a prior art effect of previously filed but yet unpublished patent applications.

26. *Japan*. Pursuant to Section 29*bis* of the Patent Law of 1959, as amended in 1985, if an invention claimed in a patent application is identical with an invention or device (not made by the inventor of the invention claimed in the patent application) that has been described in the specification or drawings of another application for a patent or for a utility model registration (a specification, under Section 36, meaning claims and

description) and where such other application was filed earlier than the patent application concerned and was published or laid open for public inspection after the filing of the patent application concerned, a patent shall not be granted for the first-mentioned invention. However, this provision does not apply where, at the time of filing of the patent application, the applicant in this and in the other earlier application is one and the same person. Section 29*bis* appears to be interpreted to the effect that, for purposes thereof, earlier unpublished applications are taken into consideration as of their priority date. Where the earlier application is an international patent application without a priority, Section 29*bis* expressly provides that such application is a bar to patentability as of its "international filing date."

27. Section 29*bis* is applied for the purpose of determining novelty. Furthermore, when the invention claimed in the latter application is identical with the invention which is described in the specification or claim of the former application, the earlier application is a bar to the grant of a patent on the later application.

28. *Netherlands.* According to Sections 2(3) and 7(4) of the Patents Act of 1910, as last amended in 1978, the state of the art comprises the content of applications with an earlier filing or priority date than the application under examination, which were laid open to public inspection on or after such filing or priority date. It also comprises the content of European patent applications or of international applications whose filing, priority or international filing date, as the case may be, is prior to the filing or priority date of the application under examination and which have been published on or after that date, provided that the Netherlands has been designated and, in case of an international application under the PCT, designating the Netherlands for a national patent or a European patent, the applicant has fulfilled the conditions for entry into the national phase (Section 2(4)). Those provisions do not apply for purposes of determining obviousness (Section 2A(2)).

29. *Poland.* The Law on Inventive Activity of 1972, as amended in 1984, does not contain any provision dealing with the prior art effect of previously filed but yet unpublished patent applications.

30. *Soviet Union.* Pursuant to Section 1.08 of the Guidelines on State Scientific and Technical Examination of 1974 (EZ-2-74), when determining the novelty of a claimed invention, the following is to be considered as being in the state of the art: (i) earlier filed applications for which the State Committee has decided to grant an inventor's certificate or a patent but which have not yet been published—from their internal priority date; and (ii) earlier filed applications with an "established" Convention priority for which a decision has been taken to grant a title of protection—from the Convention priority date.

31. *Spain.* Section 6(3) of the Patents Law of 1986 provides that prior art includes the contents of Spanish applications for patents and for utility models, as originally filed, whose filing or priority date (see Section 28(3)) is earlier than that of the application under examination and which are published on that or a later date. Such applications are to be taken into account for purposes of determining novelty (Section 6), but not for purposes of evaluating inventive step (Section 8).

32. *Sweden.* Pursuant to Sections 2 and 6 of the Patents Act of 1967, as amended in 1983, the contents of a patent application filed in the country, with an earlier filing or priority date than the filing or priority date of the application under examination, are to be considered as known, if the former application becomes available to the public pursuant to its being

laid open. The condition that the invention must differ essentially from what was known before does not, however, apply in respect of the contents of such an application.

33. For purposes of applying the above rule, international patent applications under the PCT, designating Sweden for a national patent, which are accorded an international filing date have the same effect as applications filed in Sweden on the same day, provided that the conditions for entry into the national phase are fulfilled (submission of the prescribed translation or copy of the application and payment of the prescribed fee) and the application has been laid open to the public by the Swedish Patent Office (Sections 29 and 31). European patent applications which have been accorded a filing date by the EPO or international applications under the PCT designating Sweden for a European patent which have been accorded an international filing date have the same effect as applications filed in Sweden on the said date, provided that they have been published by the EPO or by the International Bureau of WIPO, if that publication by the International Bureau is equivalent to publication by the EPO pursuant to Article 93 of the EPC (Section 87).

34. *Switzerland.* Section 7a of the Federal Law on Patents for Inventions of 1954, as revised in 1976, provides that an invention is not deemed to be new if, while not included in the state of the art, it is the subject of a valid patent granted in respect of Switzerland as a result of a prior filing, or enjoying earlier priority. In other words, Swiss law recognizes the prior art effect of previously filed patent applications as of their priority date but only for purposes of determining novelty, not inventive step. On the other hand, in contrast to the EPC and most other laws under examination, only the claims (not the description) are taken into account (see Article 139 of the EPC).

35. *United Kingdom.* Pursuant to Section 2(3) of the Patents Act of 1977, the state of the art in the case of an invention to which a patent application or a patent relates comprises matter contained in an application for another patent which was published on or after the priority date of that invention, if the following conditions are satisfied: (a) that matter was contained in the application for that other patent both as filed and as published; and (b) the priority date of that matter is earlier than that of the invention.

36. An application for a European patent designating the United Kingdom and having a filing or priority date under the EPC is treated as an application for a patent under the Patents Act having that date as its filing or priority date (Section 78(1)). An international application for a patent designating the United Kingdom for which a filing or priority date has been accorded (whether by the Patent Office or by any other body) under the PCT is treated as an application for a patent under the Patents Act having that date as its filing or priority date, but such an application is treated as published for the purposes referred to in paragraph 35 only if the conditions specified for entry into the national phase have been met; where the application is not in English, a translation into English must have been filed (Section 89). Similarly, an international application for a European patent designating the United Kingdom is so treated only if it has entered the regional phase and a copy of the application in English, French or German has been supplied to the EPO (Section 79(2)).

37. Previously filed but yet unpublished patent applications are not to be taken into account for purposes of determining inventive step (Section 3).

38. *United States of America.* According to Section 102(e) of Title 35 (Patents) of the United States Code, a patent cannot

be granted for an invention which was described in a patent granted on an application filed by another in the United States of America before the invention thereof by the applicant, or on an international application by another who has fulfilled certain specified requirements (see paragraph 41, below) before the invention thereof by the applicant. The aforementioned provision constitutes a condition of patentability without any distinction as to whether it is to be applied for purposes of determining novelty or inventive step (Sections 102(e) and 103). The whole contents (claims and description) of previously filed applications are taken into account.

39. However, special attention should be drawn to two particular aspects of the law of the United States of America. First, in order for a previously filed but yet unpublished patent application to be included in the state of the art to be examined with respect to another application, it must have been filed in the United States of America before the making of the invention claimed in the application under examination. As regards inventions made in the United States of America, the date of invention is established by reference to knowledge or use or other activity in the country. Therefore, this date can be much earlier than the filing date of the application for the grant of a patent for that invention. On the other hand, as regards inventions made abroad, the date of invention cannot be established by reference to knowledge or use or activity in a foreign country (Section 104). Therefore, for an application under examination claiming an invention made abroad, the effective date of invention is usually the foreign priority date of the application for the grant of a patent for that invention, correspondingly, a date that is later than the actual date of invention.

40. The second important aspect of the law of the United States of America is that the prior art effect of previously filed but yet unpublished patent applications takes place only as of their filing date in the United States of America and not their priority date. In other words, the effective date of reference for purposes of Section 102(e) is the actual date of filing in the United States of America. This is so, although Section 119 provides that an application validly claiming the priority of an earlier foreign filing has the same effect as the application would have had if it had been filed in the United States of America on the priority date, since Section 102(e) is applied independently of Section 119. This literal interpretation of Section 102(e) was reaffirmed *In re Hilmer* (149 U.S.P.Q. 480 (1966)). In the said decision, the Court of Customs and Patent Appeals distinguished the situation where a prior application is used as a prior art reference under Section 102(e), in which case the time of the application's prior art effect must be the actual filing date in the United States of America, and the situation where a prior application is involved in a priority contest with a subsequent application, in which case the prior application can benefit from its priority date based on an earlier filing in another country. The benefits of an earlier filing date in another country can be invoked under Section 119 in a priority contest with a subsequent application or, also, as a defense against events which would prevent patenting, such as a publication during the priority period, i.e., after the earlier filing date in another country. However, Section 119 cannot be invoked for purposes of determining the effective date for prior art purposes of a previously filed application. The Court stated that the prior art effect of previously filed applications is taken into account as of "the actual filing date when the disclosure is on deposit in the United States Patent and Trademark Office and on its way, in due course, to publication in an issued patent."

41. As regards international applications under the PCT, the international filing date is not equated, for prior art effect purposes, to a filing date in the United States of America. An international application has a prior art effect in the United

States of America as of the date on which the following elements are submitted to the United States Patent and Trademark Office: the prescribed national fee, a copy of the international application (unless not required), a translation into English of the application if the latter was filed in another language, and an oath or declaration (Sections 102(e) and 371(c)(1), (2) and (4)). These requirements are stricter than those which must be fulfilled in order to obtain a filing date in the United States of America for a national application (for information concerning requirements for granting a filing date under the law of the United States of America, see document HL/CE/II/2 Supp.1, above).

D. Comparative Analysis

42. The relevant provisions of the PCT are to be distinguished from those of the EPC and the national legislation covered in this memorandum because the PCT establishes a centralized (and, therefore, uniform) system for the initial phase of the processing of patent applications filed pursuant thereto ("international applications"). For that purpose, and specifically for purposes of the international search and of the international preliminary examination, it defines "prior art" in Rules 33.1 and 64.1 under the PCT. Although the PCT does not actually prescribe that previously filed but yet unpublished patent applications are to be treated as prior art, Rules 33.1(c) and 64.3 do require that such documents be mentioned in the international search report and that any international preliminary examination report call attention to such documents. The definition of prior art in Rules 33.1 and 64.1 is not binding on the Contracting States. On the contrary, in its Article 27(5), the PCT expressly leaves the "definition of prior art" and the determination of the "patentability of an invention claimed in an international application" to national law.

43. As regards the prior art effect of international applications, each Contracting State, unless it makes a declaration under Article 64(4), gives to international applications under the PCT the effect of a regular national application as of the international filing date (Article 11(3)) (see, however, paragraph 47, below).

44. The EPC and the laws of France, the German Democratic Republic, Germany (Federal Republic of), Japan, the Netherlands, the Soviet Union, Spain, Sweden, the United Kingdom and the United States of America recognize the prior art effect of the whole contents of previously filed but yet unpublished patent applications. On the other hand, the laws of Australia, Austria, Brazil, Canada, Czechoslovakia, Greece, Poland and Switzerland, even though some of them provide for the prior claim approach, do not provide for a prior art effect of the whole contents of previously filed but yet unpublished patent applications.

45. In countries where a previously filed but yet unpublished patent application constitutes prior art, it does so on the condition that it eventually is published; in other words, such application must physically become prior art at a later stage.³ In effect, what the relevant legislative provisions do is that they establish a legal fiction whereby, for prior art effect purposes, the relevant date of published applications or patents is antedated to a date earlier than their actual date of publication.

46. The prior art effect of applications, however, occurs with certain limitations. Previously filed but yet unpublished

³For the Soviet Union, the condition is formulated somewhat differently. In order for an application to have a prior art effect, a decision must have been taken to grant a title of protection thereon, the consequence being the publication of the contents of the application in the form of the title of protection applied for.

patent applications do not become prior art in the same way as they do after their date of publication. For purposes of comparison, two important distinctions can be identified among the relevant provisions. The first distinction concerns the date as of which the prior art effect occurs (i.e., the priority date or the actual filing date in the country). The second distinction concerns the purpose of the prior art effect (i.e., for purposes of determining only novelty or also inventive step).

47. As regards the first distinction, under the EPC and the laws of all the countries examined herein that recognize the prior art effect of previously filed but yet unpublished patent applications, except for the United States of America, such patent applications are considered prior art as of their priority date, if any priority is claimed. In the case of international applications under the PCT, the international filing date or, if priority is claimed, the filing date of the earlier application, is recognized by the EPC and the laws of some EPC Contracting States as the prior art effective date only if, in addition to international publication, the conditions for entry into the national phase are fulfilled, i.e., only if the national fee is paid and the translation of the international application, where required, is furnished. Under the law of the United States of America, as interpreted by the United States Patent and Trademark Office and the courts, the prior art effect of previously filed but yet unpublished patent applications takes place only as of the actual filing date in the United States of America, even if a priority based on an earlier foreign filing is claimed; in the case of international applications filed under the PCT, such date is the date on which certain specified requirements are satisfied (see paragraph 41, above).

48. As regards the second distinction, under the EPC and the laws of most of the countries examined and which recognize the prior art effect of previously filed but yet unpublished patent applications, such prior art effect is recognized for purposes of determining novelty, not inventive step. Under the laws of the German Democratic Republic and the United States of America, there is no such restriction.

IV. Arguments in Favor of a Uniform Solution

49. The diversity of rules provided for under national legislation and the EPC regarding the prior art effect of previously filed but yet unpublished patent applications constitutes a serious difficulty for the users of the patent system when they wish to apply for patents in several countries, whether under the PCT or through national routes.

50. If the rules defining the scope of the prior art differ in various countries, then what is patentable and the protection granted for the same invention may not be the same in all countries. This can be a handicap for international trade and the transfer of technology.

51. The law of the United States of America raises additional questions. Foreign applicants who wish to establish the effective date for prior art purposes of their applications in the United States of America (i.e., the date as of which their applications will enter the state of the art) cannot rely on their foreign priority date. For such purposes, they must rush to file in the United States of America in order to obtain as early a filing date in that country as possible, since the contents of their applications will constitute prior art against any other applications only as of that date. In the reverse situation, applicants from the United States of America can rely on their filing date in the United States of America, which is the priority date in the other countries party to the Paris Convention for the Protection of Industrial Property, as the

date on which the contents of the application become prior art under the EPC and in all the countries covered in this memorandum that recognize the prior art effect of previously filed but yet unpublished applications. However, under the EPC and the laws of those other countries (except the German Democratic Republic), the application in the United States of America, in such a case, can be used as a prior art reference only to challenge the novelty and not the inventive step of the invention claimed in a later application.

52. Filing an international application under the PCT does not avoid the above problem; moreover, it delays the prior art effect even further. When using the PCT and having designated the United States of America as a State for which protection is desired, applicants likewise cannot rely, if priority is claimed, on the priority date as the date on which the contents of their international applications become prior art in the United States of America. But they cannot even rely on their international filing date, as the prior art effect for an international application is only obtained once requirements to which even national applications are not subject are fulfilled (see paragraph 41, above). Although this legal situation is permitted by the PCT because of the declaration under Article 64(4) PCT which the United States of America has made, the result is not in line with one of the basic principles of the PCT, namely, that international applications which are accorded an international filing date are equivalent to regular national applications as of that date.

53. Thus it is proposed to solve the above problems by establishing the rule that the whole contents of an application constitute prior art, for the purpose of determining the novelty of an invention claimed in another application, from the filing or validly claimed priority date, to the extent that the former application or the patent granted thereon is published subsequently.

54. It is suggested not to include in the proposed solution the requirement, contained in the EPC and some national laws (see paragraph 47, above), that the conditions for entry into the national phase must be fulfilled for an international application under the PCT to obtain a prior art effect as of the international filing date or, if priority is claimed, the filing date of the earlier application. Firstly, the condition that a translation must be furnished and, even more, that a fee must be paid, is not consistent with the concept of prior art, according to which technological information becomes prior art by mere publication, irrespective of the language of publication and of the payment of any fee. Secondly, the said requirement is not in line with one of the basic principles of the PCT, namely, that international applications which are accorded an international filing date are equivalent to regular national applications as of that date.

V. Principles of a Solution

55. The principles of a solution to be embodied in an international treaty could be drafted as follows:

"(1) The whole contents of an application as filed in, or with effect for, a Contracting State shall, for the sole purpose of determining the novelty, but not the inventive step, of an invention claimed in another application filed in, or with effect for, that State, be considered under the national law applicable in the said State as prior art from the date on which the former application was filed or, to the extent priority is validly claimed, from the priority date for matter contained in both the former application and the application on which the priority claim is based, to the extent that the former application or the patent granted thereon is published subsequently.

"(2) For the purposes of paragraph (1), 'published' shall mean any first act of making available of the application to the public by reason of an official act, including any making available of the application to the public for purposes of public inspection without reproduction of the application, whether such act occurs prior to or by reason of the grant of a patent on that application.

"(3) For the purposes of paragraph (1), 'whole contents' of an application shall refer to the description and any drawings, as well as the claims, but not to the abstract.

"(4) Paragraph (1) shall not apply to applications which were withdrawn prior to their publication but which were nevertheless published.

["(5) Paragraph (1) shall not apply when the applicant of the former application and the applicant of the application under examination is one and the same person."]

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IV. EXTENSION OF PATENT PROTECTION OF A PROCESS TO THE PRODUCTS OBTAINED BY THAT PROCESS; PROOF OF INFRINGEMENT OF A PROCESS PATENT

(HL/CE/III/2 Supp. 4)

Memorandum by the International Bureau of WIPO

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I. Introduction

1. This memorandum deals with a special category of inventions, namely, inventions that consist of, or that relate to, processes (hereinafter referred to as "process inventions"). It is generally recognized that a process, if it complies with the conditions of patentability of inventions, can be protected by a patent.¹ A "process" typically is a technical solution consisting of a series of steps, and the result of a process may be a product.² Processes may be of a chemical nature, leading to

chemical compounds, or may belong to other fields of technology (for example, mechanical engineering, nuclear technology, microbiology, etc.). Several different processes may be used, one after the other, in order to produce a product; therefore, a "product" may also be an intermediate form of a product. Moreover, processes may effect the transformation or finishing of existing products (for example, the painting, drying, etc., of a product). In addition to processes that produce products, there also exist processes that have other technical effects, such as the creation of energy, heat, sounds, etc., the analysis of substances or the measuring of temperature, etc. For the purposes of this memorandum, however, only processes that result in products are to be considered, and the expression "process invention," unless otherwise stated, hereinafter is used only for such particular processes.

2. As regards patents for process inventions (hereinafter referred to as "process patents"), two questions arise which are examined in this memorandum.

3. The first question concerns the definition of the exclusive right conferred by a process patent. In a number of countries (however with important exceptions), the exclusive right of the owner of a process patent not only covers the use of the process but also—in respect of a product obtained directly by means of the patented process—certain acts which are protected under a product patent, typically the acts of importing, offering for sale, selling and using the product.³ This broad definition of the exclusive right conferred by a process patent is meant when this memorandum speaks of "extension of patent protection of a process to the products obtained by that process." The extension seems to be an exception to the principle that the protection conferred by a patent for an invention is defined by the object of the invention. In the case of a process invention, a strict application of the said principle would mean that the owner of a process patent could only exclude others from using the patented process. The legal provisions which extend process protection to products obtained by the patented process are based on practical economic considerations. A process which leads to a specific product presents an economic value only through the product. However, it is not always possible to obtain a patent for the product; for example, the product may not be new or may—although new—lack inventive step. The invention of a new and inventive process for the production of such a product which is not patentable constitutes an important technological advance but the reward granted through a process patent is not important because—without an extension to the product—the process patent would be difficult to enforce (since infringement of the process is difficult to prove) and could even be circumvented by use of the process in another country and sale of the products produced in the country where the process is protected. In order to make patent protection of a process meaningful, it is therefore necessary to consider the patented process and the resulting product as a whole, with the consequence that process protection is automatically extended to the resulting product even if the said product has not been claimed. Relevant legal provisions are considered in Part III of this memorandum (see paragraphs 6 to 53, below).

4. The second question concerns the proof of infringement of a process patent. Whereas the infringement of a product patent normally is proven by the fact that the infringing product is imported or offered for sale, difficulties arise with respect to the proof of the infringement of a process patent, whether or not the process results in a product. The use of the patented process by a competitor typically does not take place in public. Normally, information on such use is available only through an inspection of the premises of the competitor or

¹ In this memorandum, "patents" mean both patents for inventions and inventors' certificates, and the expression "patented" is used in this sense.

² See Model Law for Developing Countries on Inventions (hereinafter referred to as the "WIPO Model Law"), Commentary e. on Section 112.

³ See Section 135(2) of the WIPO Model Law.

through witnesses, for example, employees of the competitor who are involved in the use of the patented process. Where the patented process is a process producing a product, the importation or offering for sale of the said product cannot as such be considered as proof of the use of the process since another process may have been used for producing the product. For these reasons, infringement of a process patent frequently cannot be pursued because the plaintiff⁴ cannot prove use of the patented process. In order to overcome this problem, the laws of some countries provide that, where a patent relates to a process for obtaining a new product, the same product, when produced by any other party (the defendant⁴) is deemed to have been obtained by the patented process, unless that other party can prove the contrary. This provision amounts to a reversal of the usual burden of proof (which is that the plaintiff has to prove the existence of an infringement): where the product is the same, the plaintiff is relieved from proving the use of the patented process by the defendant; instead, the defendant must prove that the product was obtained by a process other than the patented process and, consequently, *not* by the patented process. Relevant legal provisions will be considered in Part III of this memorandum (see paragraphs 6 to 53, below).

II. Purpose of the Memorandum

5. The purpose of this memorandum is to examine the existing provisions in respect of extension of patent protection of a process to the products obtained by that process and proof of infringement of the patented process and to suggest a uniform solution which could easily be applied by courts, and which would have the advantage that owners of process patents would no longer be confronted with differences of legal protection in the various countries. The solution proposed should be acceptable to the largest number of countries. In this connection, reference is made to the significant achievements in respect of the harmonization of certain provisions of patent law already obtained as a consequence of the European Patent Convention (1973) and the Community Patent Convention (1975; not yet in force).

III. Existing Legislative Provisions

A. Information Used in the Present Memorandum

6. Before any uniform solution is proposed, the existing provisions—in respect of (i) the extension of process patents to products obtained by the patented process and (ii) proof of infringement of a process patent—are examined. While recognizing that rules may be found in the legislation of a great number of countries, the present memorandum, in view of the great amount of material involved, covers only the laws of some of them, selected on the basis of statistical criteria. Thus, the following information has been taken into account:

- (i) the provisions of the Stockholm Act (1967) of the Paris Convention for the Protection of Industrial Property (hereinafter referred to as the "Paris Convention");
- (ii) the provisions of the European Patent Convention (EPC), the Community Patent Convention (CPC) and of the legislation (laws, regulations, etc.) of those 18 countries in which or for which, according to the statistics published by WIPO (IP/STAT/1984/A), more than 4,000 titles of protection for inventions were

granted in 1984. Those countries are Australia (7,252), Austria (8,565), Brazil (4,887), Canada (20,545), Czechoslovakia (6,601), France (23,666), German Democratic Republic (11,544), Germany (Federal Republic of) (21,758), Greece (9,153), Japan (61,800), the Netherlands (10,257), Poland (4,185), the Soviet Union (62,907), Spain (8,213), Sweden (11,670), Switzerland (13,977), the United Kingdom (18,867) and the United States of America (67,201). The figures in parenthesis following the names of all States except the Soviet Union indicate the number of patents granted in 1984; the figure concerning the Soviet Union represents the total number of patents and of inventors' certificates granted in 1984.

7. In general, the present memorandum is based on legislative provisions (treaties, laws, regulations, etc.) and only exceptionally takes into account the interpretation given to the said provisions by courts and industrial property offices or the practice of industrial property offices. The present memorandum only presents a short summary of the said provisions.

B. The Paris Convention for the Protection of Industrial Property

8. Article 5*quater* of the Paris Convention reads as follows:

"When a product is imported into a country of the Union where there exists a patent protecting a process of manufacture of the said product, the patentee shall have all the rights, with regard to the imported product, that are accorded to him by the legislation of the country of importation, on the basis of the process patent, with respect to products manufactured in that country."

This provision does not require Paris Union member States to provide for an extension of patent protection of a process to the products obtained by that process, nor does it require the provision of a reversal of the burden of proof as described in paragraph 4, above. However, Article 5*quater* obliges those Paris Union member States which in their national law *provide* for an extension of patent protection of a process and/or a reversal of the burden of proof *to recognize* the effects of the extension of patent protection of a process and/or the reversal of the burden of proof with respect to *imported* products in the same way as with respect to products manufactured in the country. In other words, Article 5*quater* becomes operational only in a Paris Union member State that has decided to adopt certain provisions in its national law, namely, provisions concerning the extension of patent protection of a process to products obtained by the process and/or provisions on the reversal of proof of infringement of a process patent. In such a State, Article 5*quater* has the effect that a process patent is infringed through the importation of products manufactured according to the patented process in another country and—where the national law provides for the reversal of the burden of proof—that the importer of the said products has to prove that the patented process was not used in manufacturing the products. Without the effect prescribed by Article 5*quater*, the provisions of national laws concerning the extension of patent protection of a process and/or the reversal of the burden of proof could easily be circumvented by using the patented process in another country and importing the products obtained into the country where the process is patented. However, as already stated, Article 5*quater* of the Paris Convention does not achieve a harmonization of national laws in respect of the extension of process protection to products obtained by the patented process and proof of infringement of a process patent.

⁴ In this memorandum, "plaintiff" means the owner of the patent and "defendant" the alleged infringer.

C. *European Patent Convention, Community Patent Convention and National Legislation*

9. *European Patent Convention.* The European Patent Convention (EPC) needs to be considered in this memorandum because, in spite of the basic principle according to which the rights conferred by a European patent are determined by the national law of each Contracting State in respect of which the European patent has been granted (see Article 64(1) and (3) EPC), a relevant provision is contained in Article 64(2) EPC, which reads as follows:

"If the subject-matter of the European patent is a process, the protection conferred by the patent shall extend to the products directly obtained by such process."

10. The European Patent Convention does not deal with the infringement of European patents, leaving this matter to the applicable national law (see Article 64(3) EPC). Consequently, the question of proof of infringement of process patents is not dealt with in the EPC.

11. *Community Patent Convention.* The Community Patent Convention (CPC), which was concluded in 1975 between the Member States of the European Community in order to establish uniform rules concerning European patents for the said States and which is not yet in force, provides in its Article 29(c) for the right of the proprietor of a Community patent "to prevent all parties not having his consent ... from offering, putting on the market, using, or importing or stocking for these purposes the product obtained directly by a process which is the subject-matter of the patent."

12. As regards the burden of proof, the CPC contains in its Article 75 a provision which reads as follows:

"1. If the subject-matter of a Community patent is a process for obtaining a new product, the same product when produced by any other party shall, in the absence of proof to the contrary, be deemed to have been obtained by the patented process.

"2. In the adduction of proof to the contrary, the legitimate interests of the defendant in protecting his manufacturing and business secrets shall be taken into account."

13. *Australia.* The Patents Act 1952, as amended to 1982, does not provide for an extension of process patent protection to a product obtained by the patented process or for a reversal of burden of proof concerning infringement of a process patent.

14. *Austria.* The Patent Law of 1970, as amended in 1984, provides in Section 22(2) that, if a patent has been granted for a process, it shall be effective also in respect of the products manufactured directly by that process.

15. According to Section 155 of the Patent Law, in the case of a patent for a process for the manufacture of a new substance, any substance with the same composition shall, pending proof of the contrary, be regarded as having been manufactured according to the patented process.

16. *Brazil.* The Industrial Property Code of 1971 does neither provide for an extension of process patent protection to a product obtained by the patented process nor for a reversal of burden of proof concerning infringement of a process patent.

17. *Canada.* The Patent Act of 1952, as amended in 1972, does not contain a provision extending process patent protection to a product obtained by the patented process. Such

an extension therefore can only be achieved by claiming, when the process is of a certain kind (see below), the resulting product in addition to the process. Section 41(1) contains a special rule concerning the possibility of claiming, in addition to the process, the product obtained by the process. It reads as follows:

"In the case of inventions relating to substances prepared or produced by chemical processes and intended for food or medicine, the specification shall not include claims for the substance itself, except when prepared or produced by the methods or processes of manufacture particularly described and claimed or by their obvious chemical equivalents."

This provision establishes the principle that substances prepared or produced by chemical processes and intended for food or medicine are excluded from patent protection. As an exception to this principle, such a substance may nevertheless be patented if it is prepared or produced by a method or process of manufacture particularly described and claimed or by their obvious chemical equivalents. The exception permits patenting of the substance together with the process for its manufacture. Although this is not the kind of extension of process protection considered in this memorandum, the result is practically the same. Courts, however, have accepted that the Patent Act does provide for extension of process protection; see *Farbwerke Hoechst v. Halocarbon (Out), Ltd.* 15 CPR 105 Headnote (d) (1974), page 6.

18. As regards proof of infringement, Section 41(2) of the Patent Act provides the following:

"In an action for infringement of a patent where the invention relates to the production of a new substance, any substance of the same chemical composition and constitution shall, in the absence of proof to the contrary, be deemed to have been produced by the patented process."

19. *Czechoslovakia.* The Law on Discoveries, Inventions, Rationalization Proposals and Industrial Designs of 1972 does not provide for an extension of process patent protection to a product obtained by the patented process or for a reversal of burden of proof concerning infringement of a process patent.

20. *France.* Section 28(2) of the Patent Law of 1968, as last amended and supplemented in 1984, provides that, where the subject matter of the patent is a process, the protection conferred by the patent shall extend to the products directly obtained by such process. Consequently, Section 29(c) of the Patent Law extends the exclusive right conferred by a process patent to the offering, putting on the market, using, or importing or stocking for these purposes, of a product obtained directly by the patented process.

21. The Patent Law does not contain a provision concerning proof of infringement of a process patent. However, Section 56 of the Patent Law provides indirectly for a reversal of the burden of proof in certain cases.

22. *German Democratic Republic.* According to Section 12(2) of the Law of 1983 on the Legal Protection of Inventions (Patent Law), the right to use an invention under an economic patent or an exclusive patent includes the right to produce, use, offer for sale and sell the subject matter of the invention; where a manufacturing process is protected, those rights also extend to the products manufactured directly by that process.

23. As regards proof of infringement, Section 29(2) provides that, where an action for discontinuance or for damages concerns an invention for the process of manufacture

of a new substance, any substance of the same nature shall be considered, until there is proof to the contrary, as having been produced by means of the patented process.

24. *Germany (Federal Republic of)*. According to Section 9(3) of the Patent Law of 1981, the exclusive right conferred by a patent covers the offering, putting on the market, using or importing or stocking for these purposes, of the product manufactured by a process which is the subject matter of the patent.

25. Section 139(3) of the Patent Law provides that, if the subject matter of a patent is a process for obtaining a new product, the same product when produced by any other party shall, in the absence of proof to the contrary, be deemed to have been obtained by the patented process; in the adduction of proof to the contrary, the legitimate interests of the defendant in protecting his manufacturing and business secrets shall be taken into account.

26. *Greece*. According to Section 5 of the Law of 1920 on Patents of Invention, if a patent has been granted in respect of a method of production, the products directly obtained by that method also enjoy protection.

27. Section 34, second paragraph, of the Law provides that, in the case of an invention which relates to a method of production of a new product, any product of the same nature shall be deemed, until otherwise proven, to have been manufactured by the patented method.

28. *Japan*. Section 2(3) of the Patent Law of 1959, as amended in 1982, contains a definition of the term "working," which term is used in Section 68 for the purposes of defining the exclusive right of the patentee. According to Section 2(3)(iii), working of an invention means, in the case of an invention of a process of manufacturing a product, acts of using, assigning, leasing, displaying for the purpose of assignment or lease, or importing, the product manufactured by the process, in addition to using the process.

29. Section 104 of the Patent Law provides that, in the case of a patent for an invention of a process of manufacturing a product, where such product was not publicly known in Japan prior to the filing of the patent application concerned, any identical product shall be presumed to have been manufactured by that process.

30. *Netherlands*. Section 30(1)(b) of the Patents Act of 1910, as last amended in 1978, provides that a patent confers on its proprietor the sole right to apply the patented process in or for his business or to make, use, put on the market, resell, hire out or deliver the product obtained directly as a result of the application of the patented process, or deal in any other way, in or for his business, in the product, or to offer it or stock it for these purposes, with the exception of any product excluded from the grant of a patent as a result of Section 3(2).

31. As regards the burden of proof of infringement of a process patent, Section 43(5) of the Patents Act provides that, where proceedings are brought for the enforcement of a patent relating to a process for the manufacture of a new product, it shall be assumed that the product in question has been manufactured by using the patented process, unless the defendant can establish the plausibility of the contrary; the contents of patent applications filed and later published shall not be taken into consideration in a judgment relating to the novelty of a product. Thus, the law of the Netherlands does not completely reverse the burden of proof; if the defendant establishes the plausibility that the product has not been manufactured by

using the patented process, the owner of the patent has to prove that the patented process was used.

32. *Poland*. The Law on Inventive Activity of 1972, as amended in 1984, provides, in Section 16(4), that a patent granted for a manufacturing process also covers products directly obtained from the process. Section 12(1)(ii), however, excludes from patent protection food stuffs, pharmaceuticals and chemical products.

33. According to Section 57(3) of the same Law, in the case of a patent for a process of manufacturing a new product, any product which can be obtained by means of the patented process is presumed to have, in fact, been produced by that process.

34. *Soviet Union*. The Statute on Discoveries, Inventions and Rationalization Proposals of 1973, as amended in 1978, does not provide for an extension of process protection to products obtained by the protected process, nor does it regulate the proof of infringement of a process patent.

35. *Spain*. Law 11/1986 of March 20, 1986, provides, in its Section 50, that a patent confers upon its proprietor the right to prevent any third party, without his consent, from offering, putting on the market or using a product directly obtained by means of the patented process, or importing or processing such a product for any of the said purposes. Section 61 further provides that, when a product for the manufacture of which a process patent exists in Spain is imported into the country, the patent owner has, with respect to the product so imported, the same rights as are granted to him in relation to products manufactured in Spain. Where a patent relates to a process for the manufacture of new products or substances, it is presumed, in the absence of proof to the contrary, that any product or substance of the same characteristics has been obtained using the patented process. When effecting the necessary formalities for the proof to the contrary, the legitimate interests of the defendant are taken into consideration for the protection of his trade or industrial secrets.

36. *Sweden*. According to Section 3, first paragraph, item (3), of the Patents Act of 1967, as amended in 1983, the exclusive right conferred by a patent covers the offering, putting on the market, or using, of products made by a process protected by the patent, or the importing or possessing of the product for these purposes.

37. There is no provision in the Patents Act concerning proof of infringement of a process patent.

38. *Switzerland*. Section 8(3) of the Federal Law on Patents for Inventions of 1954, as revised in 1976 (hereinafter referred to as the "Patent Law"), provides that, if an invention concerns a process, the effects of the patent shall extend to the immediate products of the process.

39. According to Section 67(1) of the Patent Law, if an invention concerns a process for the manufacture of a new product, every product of the same composition is presumed to have been made by the patented process until proof to the contrary has been adduced. Section 67(2) provides that Section 67(1) applies by analogy in the case of a process for the manufacture of a known product if the patentee shows *prima facie* evidence of infringement of the patent. According to Section 68(1) of the Patent Law, manufacturing or business secrets of the parties are to be safeguarded, and Section 68(2) provides that evidence which would disclose such secrets may be made available to the adversary only to such an extent as is compatible with the safeguard of the secrets.

40. *United Kingdom.* Under Section 60(1)(c) of the Patents Act 1977, a person infringes a patent if, where the invention is a process, he disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.

41. As regards proof of infringement of a process patent, Section 100(1) of the Patents Act provides that, if the invention for which a patent is granted is a process for obtaining a new product, the same product produced by a person other than the proprietor of the patent or a licensee of his shall, unless the contrary is proved, be taken in any proceedings to have been obtained by that process. Section 100(2) stipulates that, in considering whether a party has discharged the burden imposed upon him by Section 100(1), the court shall not require him to disclose any manufacturing or commercial secrets if it appears to the court that it would be unreasonable to do so.

42. *United States of America.* According to Section 154 of Title 35 (Patents) of the United States Code, as last amended in 1984, a patent confers the right to exclude others from making, using, or selling the invention, and Section 271(a) provides that whoever without authority makes, uses or sells any patented invention infringes the patent. These provisions do not establish an extension of process patent protection of the kind considered in this memorandum, and, therefore, such an extension has not been admitted by the courts.

43. There is no provision concerning proof of infringement of a process patent.

44. However, Section 1337a of Title 19 (Customs Duties) of the United States Code, which concerns unfair trade practices in respect of importation of products, contains a provision according to which products of processes that are patented in the United States of America receive the same treatment as products patented in the United States of America. This provision has the effect of an extension of process patent protection to products obtained by the patented process. It applies not only to products manufactured abroad but also to products manufactured in the United States of America, exported and reimported into the country. Moreover, the legal consequences of the said provision—namely, measures to be taken by the United States International Trade Commission—are different from the sanctions for patent infringement as provided under the Patent Law. Legislation is under preparation in the United States of America with respect to extending process patent protection to products.

D. Comparative Analysis

45. When comparing the provisions of the European Patent Convention, the Community Patent Convention and the 18 national laws referred to in the preceding Chapter, it appears that the industrial property laws of 13 countries (Austria, Canada, France, German Democratic Republic, Germany (Federal Republic of), Greece, Japan, Netherlands, Poland, Spain, Sweden, Switzerland, United Kingdom), the EPC and the CPC provide for an extension of patent protection of a process to products obtained by the patented process, whereas the laws of five countries (Australia, Brazil, Czechoslovakia, the Soviet Union, the United States of America) do not provide for such extension. As far as the reversal of the burden of proof concerning infringement of process patents is concerned, the laws of 12 countries (Austria, Canada, France (with some qualifications), German Democratic Republic, Germany (Federal Republic of), Greece, Japan, Netherlands (with some qualifications), Poland, Spain, Switzerland, United Kingdom) and the CPC provide for such reversal, whereas the laws of six countries (Australia, Brazil, Czechoslovakia, the

Soviet Union, Sweden, the United States of America) and the EPC (the latter because of its limited objective) do not provide for such reversal of proof.

46. Although the provisions concerning the two questions dealt with in this memorandum are basically the same in the national laws referred to in the preceding paragraph, as well as in the EPC and the CPC, certain differences exist. They are analyzed in the following paragraphs (paragraphs 47 to 53).

47. *Extension of Process Protection to Products Obtained by the Protected Process.* Two aspects of the relevant provisions deserve particular attention, namely, the question of whether the result of the patented process is a "product" and the question of whether the product must be "directly" obtained by the process.

48. As regards the result of the process to which the protection extends, all laws, and the EPC and the CPC, use the expression "product." It is to be noted, however, that the laws of Austria and the German Democratic Republic, while extending process protection to "products," use the expression "substance" in connection with the reversal of the burden of proof and that the law of Canada, which only provides for a reversal of the burden of proof but not for an extension of process patent protection, refers to a "substance of the same chemical composition and constitution."

49. As regards the link between the process and the product, generally national laws, the EPC and the CPC require that the product must be "directly obtained" by the process. The following are exceptions: the laws of Austria, Germany (Federal Republic of) and the German Democratic Republic speak of "products manufactured directly" by the process; the law of Japan does not use the term "directly" but speaks only of a "product manufactured by the process"; the law of Sweden refers to "products made by a process protected by the patent"; the law of Switzerland speaks of the "immediate products of the process." Thus, the laws of Japan and Sweden seem to differ somewhat from the laws of the other countries and from the EPC.

50. *Reversal of the Burden of Proof.* Three aspects of the relevant provisions deserve particular attention, namely, (i) the question of whether the defendant's product on which the reversal of the burden of proof is based must be the same as the one described in the process patent, (ii) the question of whether the plaintiff's product must be new⁵ and (iii) the question of whether the defendant must prove that he did not use the patented process or whether he only has to make plausible that he did not use the process and whether he can avoid disclosing manufacturing or business secrets.

51. As regards the identity of the kind of product, the law of Austria speaks of "any substance with the same composition"; the law of Canada expressly refers to "any substance of the same chemical composition and constitution"; the law of the German Democratic Republic uses the expression "any substance of the same nature"; the CPC and the laws of Germany (Federal Republic of) and the United Kingdom refer to "the same product"; the law of Greece speaks of "any

⁵It appears that the term "new" is meant in the absolute (worldwide) sense but does not necessarily have the same meaning as the term "new" in the context of novelty as a condition of patentability (see paragraph 52). In particular, products which are the subject of pending but not yet published patent applications and which therefore are considered as prior art in respect of subsequent patent applications (see document HL/CE/III/2 Supp. 3, see above) do not seem to be treated as lacking novelty for the purposes of the reversal of the burden of proof.

product of the same nature"; the law of Japan uses the expression "any identical product"; the law of the Netherlands refers to "the product in question"; the law of Poland speaks of "any product which can be obtained by the patented process"; the law of Spain speaks of "any product or substance of the same characteristics" and the law of Switzerland of "every product of the same composition." Whether this diversity of expressions reflects an intended diversity of substance, so that, on the one hand, complete identity is required, whereas, on the other, unimportant deviations would be irrelevant, does not seem to deserve further examination for the purposes of this memorandum.

52. As regards the question whether the product must be new, such a condition is provided for in the CPC and in the laws of Austria, Canada, the German Democratic Republic, Germany (Federal Republic of), Greece, Japan ("product not publicly known prior to filing of the patent application concerned"), the Netherlands (with a special provision concerning the contents of patent applications that have not yet been published, to the effect that the said contents are not to be taken into consideration), Poland, Spain and the United Kingdom. Under the law of Switzerland, there are two rules concerning the proof of infringement, one establishing a reversal of the burden of proof in respect of a new product and the other establishing a reversal of the burden of proof in respect of a known product if the patentee shows *prima facie* evidence of infringement of the patent. With the exception of Japan and the Netherlands, neither the CPC nor any of the aforementioned countries specifies what is meant by "new."

53. As regards the proof of having or not having used the patented process, the law of the Netherlands does not provide for a reversal of the burden of proof but establishes an assumption of infringement unless the defendant establishes the plausibility of the contrary. A provision protecting the defendant who receives the burden of proof, because of a legal provision reversing the burden, against a requirement to disclose manufacturing and business secrets is contained in the laws of Germany (Federal Republic of), Spain, Switzerland and the United Kingdom.

IV. Arguments in Favor of a Uniform Solution

54. The diversity of provisions of the national laws covered by this memorandum, the European Patent Convention and

the Community Patent Convention presents obvious disadvantages for inventors of process inventions and owners of process patents. In a number of countries, applicants can rely on the legal provision extending patent protection of a process to the product obtained by the process. In other countries, where such an extension is not provided for by the law, inventors of process inventions must claim, in addition to the process, also the resulting product. Where this is not possible, for example, because the product in question is not new or lacks inventive step or because a patent for a product cannot be obtained and, therefore, protection of the process is particularly important, the protection is limited to the process with the known difficulties of proving infringement of a process. Therefore, an internationally accepted uniform solution in respect of the two questions examined in this memorandum would greatly facilitate the situation that inventors of process inventions have to face when they seek protection for their inventions in more than one country. Moreover, it would give true effect to the underlying intention of Article *Squater* of the Paris Convention.

V. Principles of a Solution

55. The principles of a solution to be embodied in an international treaty could be drafted as follows:

"(1)(a) If the subject matter of a patent is a process, the protection conferred by the patent, under any national law, shall extend to products directly obtained by the said process, even if for such products patents are not available.

(b) The acts of importing and distributing the product directly obtained by the patented process shall be covered by the protection referred to in subparagraph (a).

"(2)(a) If the subject matter of the patent is a process for obtaining a new product, the said product, when produced by any party other than the owner of the patent, shall, under any national law, in the absence of proof to the contrary, be deemed to have been obtained by the patented process.

(b) In the adduction of proof to the contrary, the legitimate interests of the defendant in protecting his manufacturing and business secrets shall be taken into account.

(c) Any Contracting State shall be free to apply subparagraphs (a) and (b) also to the case where the product obtained by the process is not new."

B. Committee of Experts on Intellectual Property in Respect of Integrated Circuits

Third Session
(Geneva, April 27 to 30, 1987)

NOTE*

The third¹ session of the Committee of Experts on Intellectual Property in Respect of Integrated Circuits (hereinafter referred to as the "Committee of Experts") took place in Geneva, at the headquarters of WIPO, from April 27 to 30, 1987. Experts from the following 38 States participated: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Cameroon, Canada, Colombia, Denmark, Finland, France, German Democratic Republic, Germany (Federal Republic of), Ghana, Greece, India, Ireland, Italy, Japan, Luxembourg, Madagascar, Mexico, Morocco, Netherlands, Norway, Pakistan, Panama, Republic of Korea, Soviet Union, Spain, Sweden, Switzerland, United Kingdom, United Republic of Tanzania, United States of America, Uruguay, Yugoslavia. In addition, experts from three intergovernmental organizations and 17 non-governmental organizations participated in an observer capacity. The list of participants follows this Note.

The purpose of the third session of the Committee of Experts was to review and discuss the draft of a Treaty on the Protection of Intellectual Property in Respect of Integrated Circuits. The draft considered was a draft revised in the light of the discussions of the second session (June 1986) of the Committee of Experts. It was prepared by the International Bureau. The aim of the Treaty is to provide a system of international protection for the layout-design of integrated circuits. In the discussions of the third session, reference was also made to the conclusions prepared by the participants in technical consultations held at the headquarters of WIPO in January 1987, a proposal of the United States of America on consultation procedure, a draft codicil to the Berne Convention for the Protection of Literary and Artistic Works for the protection of integrated circuit designs presented by the Delegation of India and proposals by the same Delegation concerning Articles 2 and 4(3) of the draft Treaty, a proposal by the Delegation of Japan concerning Article 4(3) and (4)(i) of the draft Treaty, a proposal by the Delegation of Denmark on behalf of the Member States of the European Communities concerning Article 4(3) and (4) of the

draft Treaty, a memorandum of the Director General of WIPO on preferential treatment for developing countries and the relevant legislative texts of Japan, Sweden and the United States of America and the European Communities, compiled by the International Bureau. The documents containing the draft Treaty and all the texts mentioned in this Note may be obtained, free of charge, from the International Bureau.

I. General Discussion

In the third session of the Committee of Experts, discussions started by general observations made by government delegations and observers on the draft Treaty and on recent national developments in the area of protection provided for layout-designs of integrated circuits.

The Delegations of Australia, Austria, Belgium, Bulgaria, Canada, Denmark, Finland, France, the German Democratic Republic, Germany (Federal Republic of), Greece, Ireland, Italy, Japan, the Netherlands, Norway, the Soviet Union, Spain, Sweden, Switzerland, the United Kingdom and the United States of America, and the observers of five non-governmental organizations expressed support for the draft Treaty as a whole. Among those delegations and observers expressing support for the draft Treaty were several which urged the convening of a diplomatic conference to adopt the Treaty under consideration. The Delegation of the United States of America extended, on behalf of its Government, an invitation to hold a diplomatic conference for that purpose in the United States of America, in 1988.

On the other hand, the Delegations of Argentina, Brazil, India, Mexico, the United Republic of Tanzania and Yugoslavia expressed serious doubts about the need for a new treaty to protect intellectual property in the area of layout-designs of integrated circuits and, in any case, asked for further studies. This position was confirmed and specified in a declaration presented by the Delegation of Ghana on the last day of the session on behalf of the 15 developing countries represented in the session.

That declaration reads as follows:

"The delegations of the developing countries present at the third session of the Committee of Experts on Intellectual Property in Respect of Integrated Circuits,

* Prepared by the International Bureau.

¹ For notes on the first and second sessions of the Committee of Experts, see *Industrial Property*, 1986, p. 110 and 373, respectively.

Having participated in the process of discussion of a draft Treaty for the protection of integrated circuit layout-designs prepared by the WIPO Secretariat and circulated for the first time in June 1985;

Taking note of the concern expressed by many developed countries as to the lack of an international framework to prevent the copying of original layouts and the trade related to such copies;

Recalling the conclusions of the technical consultations held in Geneva in January 1987 (see document IPIC/TC/1/2);

Consider it necessary to express to the Committee of Experts on Intellectual Property in Respect of Integrated Circuits the following:

1. While it is manifest the large agreement existing among developed countries as to the approach and content of an eventual treaty on the matter, the preparatory materials, including the draft treaties and commentaries, have failed to take into account the concerns, doubts and views expressed by developing countries.

2. By no way our countries desire to put any obstacles to the reaching of an understanding among developed countries on integrated circuit protection. Given the universal character of WIPO, and being this organization the appropriate forum for this matter, the work under its auspices, however, cannot be conceived without a real consensus including developing countries.

3. The majority of developing countries lack any industrial experience or technological infrastructure on this matter. The speed with which the process has evolved, the newness and complexity of the issue and the lack of concrete response to developing countries' demands for previous and deeper studies and clarification, are major limitations to our countries to accept the proposed text as drafted.

4. The rationale for developing countries to follow the proposed approach of protection is still unclear. On the one side, there seems to exist a strong unbalance between the low standards of creativity required for protection and the strong exclusive rights claimed. On the other, alternative approaches, including those based on existing international conventions or on the concept of unfair competition, have not been thoroughly explored and many doubts still remain thereon. Arguments based on the general concept of justice or on the protection of investments in developed countries are insufficient to sustain the present approach.

5. In order to facilitate a final decision on the proposed texts by our countries, a number of analyses and clarifications are still needed. We therefore request WIPO to assist in the preparation of a deep study and to organize technical consultations focusing, *inter alia*, on the issues indicated in the Annex.²

II. Discussion of the Proposed Draft Treaty

Each of the 12 articles of the draft Treaty as had been proposed by the International Bureau and the corresponding passages reflecting the discussions concerning each of them in the report are quoted in the following.

Definitions. Article 1 of the proposed draft read as follows:

"For the purposes of this Treaty:

- (i) 'Contracting State' means a State party to the Treaty,
- (ii) 'proprietor' means the natural person who, or legal entity which, according to the applicable national law, is to be regarded as the beneficiary of the protection referred to in Article 4,
- (iii) 'Director General' means the Director General of the World Intellectual Property Organization,

(iv) 'microchip' means a manufactured integrated circuit,

(v) 'integrated circuit' means a circuit in which the active elements, some or all of the interconnections and any passive elements are integrally formed in and/or on a piece of material and which is intended to perform an electronic function,

(vi) 'layout-design' means the three-dimensional disposition of the active elements, interconnections and any passive elements of an integrated circuit, in whichever form such disposition is fixed or encoded."

The corresponding passage in the report reads as follows:

"A number of the delegations expressed the view that the present wording of Article 1 could stay as contained in the draft Treaty. Most of the delegations and observers that suggested amendments on specific points declared that they were in agreement with the remainder of Article 1.

The question was raised whether the expression 'Contracting States' would be appropriate if intergovernmental organizations such as the European Economic Community were to be admitted to become parties to the Treaty. For that purpose it would be appropriate to replace the term 'Contracting State' by 'Contracting Party.'

It was pointed out that the term 'Contracting Party' seemed to be an expression which was specifically used within the framework of GATT and that it therefore might be preferable to use the term 'State Party to this Treaty.'

It was noted that the question of the participation of the European Community in any diplomatic conference on integrated circuits and the question of whether not only States but also the said Community could become a party to any treaty on the protection of integrated circuits were questions in the jurisdiction of the Governing Bodies of WIPO rather than in that of the present Committee of Experts.

In this context, it was noted that the question of whether the representative of the Commission of the European Community could, in meetings organized by WIPO, have the same status as representatives of States members of WIPO and speak for all States members of the European Community was also a question within the jurisdiction of the Governing Bodies of WIPO.

It was stated that the definitions contained in items (iv) to (vi) reflected concepts that had developed in the specific field of technology and that it might be appropriate to include other concepts in order to take into account further developments. For that reason, some delegations suggested that it should be considered to transfer provisions on technical definitions to a special protocol which could be amended more easily than the Treaty. One delegation expressed its preference for the term 'topography' over the term 'layout-design.'

Whereas a number of delegations agreed with the omission of the word 'semiconductor' which had been used in the draft of the Treaty considered by the Committee of Experts in its second session, some delegations expressed doubts whether the note in paragraph 25 would be sufficient in order to clarify that a country which only protected semiconductor integrated circuit layout-designs would comply with its obligations under the Treaty. It was stated that the Treaty, as an alternative approach, should allow countries to declare, at the time of accession or ratification, that they would only protect semiconductor integrated circuit layout-designs. One delegation suggested adding, in (v), after the words 'piece of,' the words 'single crystal material or materials,' and/or reinserting the word 'semiconductor' at appropriate places, thus ensuring that certain old technological achievements such as printed circuit boards and possible future achievements such as bubble memories would not be within the scope of the Treaty.

One delegation pointed out that any definition of a layout-design should take into account not only a physical description of a pattern, but also refer to all its attributes related to intellectual property issues, namely:

- (a) that it is the result of a given manufacturing process, which is unique;

² The declaration quoted above is accompanied by an annex. That annex is part of the report of the Committee of Experts, copies of which may be obtained free of charge from the International Bureau.

(b) that it is the result of a behavioral, functional description, that is also unique;

(c) that it is the result of a given design strategy implemented with specific tools.

It was pointed out that the definition of 'integrated circuit' in item (v) should be enlarged by adding the term 'in its final or intermediate form' so that certain intermediate forms such as gate arrays and cells would also be protected. It was noted that integrated circuit and layout-design in items (v) and (vi) may not contain any passive element."

Subject Matter of Protection. Article 2 of the proposed draft read as follows:

"The provisions of Articles 3 to 6 shall not apply to layout-designs of integrated circuits that are not the result of the creator's intellectual effort or are commonplace in the integrated circuit industry at the time of their creation or are exclusively dictated by the functions of the integrated circuit to which they apply."

The corresponding passage in the report reads as follows:

"A number of delegations expressed support for the draft of Article 2 subject to minor amendments.

It was noted that the term 'commonplace' needed clearer definition and/or elaboration to avoid needless dispute and that the International Bureau should study this.

Other delegations pointed out that Article 2 could be accepted only if it were substantially redrafted. In this connection, the Delegation of India made the proposal contained in document IPIC/CE/III/7 and reading as follows:

'The provisions of Articles 3 to 6 shall apply to layout-designs of integrated circuits, provided that:

(a) they are not direct copies of protected layout-designs,

(b) they are not commonplace at the time of first commercial exploitation, and do not so become during the term of protection specified in Article 6, and

(c) they are not one of only a limited number of ways of expressing the function that they perform.'

This proposal gave rise to the following comments:

(a) As regards the word 'direct' in subparagraph (a), it was pointed out that that word should be deleted or, if maintained, required clarification. It was clarified by the Delegation of India that the word 'direct' was necessary as otherwise many designs would be excluded from protection in view of technological progress as a result of which derivative works may well be considered copies.

(b) The word 'protected' in subparagraph (a) was considered as not being appropriate because it would mean that copies of layout-designs which were not protected could enjoy protection under Articles 3 to 6.

(c) With respect to the first part of subparagraph (b), it was pointed out that the decisive point in time should be either the first commercial exploitation or the registration, whichever occurred first.

(d) The proposal, contained in subparagraph (b), according to which a layout-design could lose its protection because it became commonplace after the beginning of the protection, was considered to be unacceptable by a number of delegations.

(e) The drafting of subparagraph (c) was considered as requiring improvement; preferably, this clause could be replaced by a provision which would follow the example of Article 8 of the EEC Directive.³

(f) One delegation pointed out that the suggested drafting, in its positive formulation, may not mean the subject matter of protection.

With respect to Article 2 contained in the draft Treaty, several delegations expressed the view that it should start out by a positive statement of the rule (namely, that layout-designs must be protected) and that the limitations provided for in the draft of Article 2 should be presented as provisos to the rule.

Several delegations felt that the third of the three conditions contained in Article 2, namely, that layout-designs are not protected if they are exclusively dictated by functions of the integrated circuit to which they apply, should be deleted. Moreover, several delegations suggested that a provision along the lines of Article 8 of the EEC Council Directive should be included in an appropriate place.

Some delegations believed that the drafting of the functional exclusion might be too broad since the design of all chips was dictated by functional considerations. It might be more useful to speak of an exclusion from protection when the layout-design can only be expressed in a limited number of ways.

It was agreed that the French text should use 'courant' rather than 'banal,' where the English text uses the term 'commonplace.'"

National Treatment. Article 3 of the proposed draft read as follows:

"Each Contracting State shall, in respect of the layout-design of integrated circuits, grant to nationals or residents of the other Contracting States the same protection that it grants to its own nationals, and it may subject such protection to the same formalities, if any, that the protection of its own nationals is subjected to."

The corresponding passage in the report reads as follows:

"Reference was made to a consequential change required with respect to the expression 'Contracting State,' if that expression were to be replaced by another expression, as discussed in connection with Article 1.

Several delegations suggested that Article 3 be reviewed in respect of its application to legal entities which are resident of a Contracting State. It was pointed out that the definition of the concept of a legal entity was required to be included in the Treaty and that it was not sufficient to leave this matter to the notes.

It was agreed that Article 3 should be reviewed, taking into account similar provisions in treaties administered by WIPO, in particular Article 2 of the Paris Convention for the Protection of Industrial Property."

Protection of Layout-Designs. Article 4 of the proposed draft read as follows:

"(1)(a) Subject to paragraphs (3) to (6), any Contracting State shall consider unlawful at least the following acts if performed without the authorization of the proprietor:

(i) copying the layout-design,

(ii) incorporating the layout-design in a microchip,

(iii) importing, selling or otherwise distributing copies of the layout-design, such a microchip, or industrial articles containing such a microchip.

(b) Any Contracting State shall provide for measures to ensure the prevention and repression of acts considered unlawful under subparagraph (a).

(2) The authorization referred to in paragraph (1)(a) may not, under any circumstances, be replaced by a non-voluntary license.

(3) Notwithstanding the provisions contained in paragraph (1)(a)(i), any Contracting State may consider lawful the copying of a layout-design, without the authorization of the proprietor, if the copying is solely for the purposes of teaching or research concerning the said layout-design.

(4) Notwithstanding the provisions contained in paragraph (1)(a), no Contracting State shall consider unlawful

³ Council Directive of December 16, 1986, on the Legal Protection of Topographies of Semiconductor Products (87/54/EEC) (referred to in the present text as "EEC Directive") (Editor's note).

(i) the copying of the layout-design without the authorization of the proprietor if the copying is solely for the purposes of analysis, evaluation or reverse engineering, provided that, where the reverse engineering results in the production of a layout-design, such layout-design is, in itself, not excluded from the application of Articles 3 to 6 according to Article 2,

(ii) the incorporating of the latter layout-design in a microchip and the importing, selling or otherwise distributing of copies of the layout-design, of such a microchip or of industrial articles containing such a microchip.

(5) Notwithstanding the provision contained in paragraph (1)(a)(iii), no Contracting State shall consider unlawful the performance, without the authorization of the proprietor, of any of the acts referred to in that provision:

(i) where the act is performed, and as long as it is performed, without actual knowledge of the fact, or without reasonable grounds for believing, that the layout-design is protected, provided that, after the party who performs the act has obtained actual knowledge of the fact, or reasonable grounds for believing, that the layout-design is protected, the performance of such acts in respect of microchips or industrial articles acquired before such event shall entail the obligation to pay reasonable remuneration to the proprietor but no other sanctions,

(ii) where the act is performed in respect of microchips or industrial articles that have been put on the market by, or with the consent of, the proprietor.

(6) Where an industrial article referred to in paragraph (1)(a)(iii) is part of a land vehicle, vessel, aircraft or spacecraft registered in a Contracting State, and when the land vehicle, vessel, aircraft or spacecraft of which the said article is a part enters, temporarily or accidentally, the territory, waters, or airspace of another Contracting State, the latter State shall not consider such event as an importation in the sense of paragraph (1)(a)(iii)."

The corresponding passage in the report reads as follows:

"A number of delegations expressed support for the text contained in the draft Treaty. As regards possibilities of improving that draft, the following comments were made.

It was suggested that the title of Article 4 be changed in order to bring it into conformity with the contents of that Article, for example, by saying 'scope of rights.'

Paragraph (1)(a). It was pointed out that the provisions of that paragraph should be limited to acts committed for commercial purposes. In this connection, it was suggested that the restricted act of importing in paragraph (1)(a)(iii) should be limited to importing for the purpose of selling or otherwise distributing. In addition, the wording of Article 5(2) of the EEC Directive would be taken into account in order to allow an exemption for private reproduction for non-commercial aims.

One delegation asked for clarification of the difference in meaning between paragraphs (1)(a)(i) and (1)(a)(ii).

One delegation proposed that in paragraph (1)(a), following the words 'the following acts if performed' the words 'for commercial purposes and' be inserted.

Several delegations proposed that the phrase 'industrial articles' be deleted throughout Articles 3 to 6 as they felt that it extended the chain of liability and created a vicarious liability.

One delegation suggested adding the words 'as defined by national law,' after the word 'acts' in the second line of that paragraph. One delegation proposed to add to paragraph (1)(a)(i) the words 'in their entirety' and to change Note 39 in document IPIC/CE/III/2 accordingly.

Several delegations expressed the view that a copy of a part of a layout-design should be an act requiring the authorization of the proprietor, and that this should be expressly mentioned in the Treaty, the Note contained in paragraph 39 of document IPIC/CE/III/2 not being sufficient in order to ensure protection against copies of parts.

Some delegations objected to paragraph (1)(a)(iii), in particular as regards the inclusion of the act of importing copies of the layout-design or microchips or industrial articles. In their view, it would be difficult for an importer to determine whether a layout-design incorporated in a microchip or the microchip contained in an industrial article would violate third party rights. Therefore, the said provision should either be deleted or, at least, be amended, for example, by replacing the word 'importing' by the word 'exporting,' since only an exporter but not an importer should be responsible for infringement.

It was suggested that the act of distributing layout-designs by means of telecommunications should be expressly mentioned in the Treaty, since that case was of practical importance, and would not fall under the present text of the draft Treaty, which only mentioned the distribution of copies of the layout-design.

In connection with paragraph (1)(a), the question was raised whether, instead of establishing a list of acts which required the authorization of the proprietor, it was not possible to rely on protection against acts of unfair competition.

In response to this question, it was stated that protection against unfair competition was applicable only between competitors and therefore could not apply in most of the situations envisaged by the draft Treaty. This was the reason why countries had adopted special laws for the protection of layout-designs of integrated circuits, as protection against unfair competition was also not sufficient for the protection of inventions, trademarks and literary and artistic works—objects of intellectual property for which special laws had been enacted.

The Delegation of Switzerland informed about an amendment of its country's law against unfair competition which, once enacted, possibly could provide for certain remedies in the case of copying of layout-designs of integrated circuits. The said provision would be applicable even without a relationship of competition between the parties, and it would in general apply to the reproduction of a technical achievement of somebody else. The Delegation further pointed out that, in spite of various other special features of the new Swiss law which did not correspond to traditional unfair competition principles, one had come to the conclusion that, with respect to the protection of integrated circuit layout-designs, the new law would not meet the required standard. This was essentially due to the fact that the Swiss law would basically allow the manufacturing of a copy of a layout-design and would not provide for a specified term of protection. Further, one also had to take into consideration that unfair competition law would not grant any exclusive rights to owners of layout-designs. Therefore, Switzerland was also making efforts to set up a *sui generis* legislation for the protection of integrated circuit layout-designs.

One delegation suggested that the term 'copy' should be defined as otherwise there would be considerable room for argument as to the meaning of that term.

Paragraph (1)(b). It was suggested that the expression 'repression' be replaced by 'prohibition' or 'suppression.'

One delegation pointed to the need that enforcement of rights required full due process, and wondered whether such a safeguard should not be expressly mentioned in the Treaty.

Paragraph (2). Some delegations referred to the discussions on the corresponding paragraphs during the second session of the Committee of Experts, and wondered why the said discussions, and in particular the proposal by the Delegation of India supported by the Delegations of Ghana, Brazil, Argentina, Morocco and Nigeria (document IPIC/CE/II/7), had not been fully reflected in the revised draft of the Treaty.

It was replied that the issue of non-voluntary licenses was highly controversial and that it was not possible for the draft Treaty to present entirely contradictory positions. Thus, a choice had to be made. However, the Notes not only gave the reasons for the suggested solution, but also referred to the proposal by the Delegation of India which had been made during the second session of the Committee of Experts which was opposed to the solution presented in the draft Treaty. Moreover, it was possible for each delegation to obtain information on the discussions during the said

second session through the report of that session (document IPIC/CE/II/8). In order to recall the relevant passages of the said report, document IPIC/CE/III/2 Add. was issued, which contains an extract from the said report reproducing the relevant passages.

Whereas some delegations expressed support for paragraph (2), other delegations pointed out that there might be a need for provisions correcting abuses and that relevant provisions should be directed against specific acts, and should safeguard due process and a fair remuneration. Some delegations proposed that paragraph (2) be omitted from the draft Treaty.

It was suggested that it should be examined whether the draft provision contained in paragraph 56 of document IPIC/CE/II/2 could not be included in the Treaty.

As an alternative solution, reference was made to Article 7 of the Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite. Several delegations expressed interest in examining this possibility.

In conclusion, it was agreed that there was a need to find a compromise solution on this point, and that the matter should be further studied, taking in particular into account the suggestions made for alternative provisions.

Paragraphs (3) and (4). A detailed discussion took place on those two paragraphs, and proposals for alternative drafting were presented by the Delegations of Bulgaria and India (document IPIC/CE/III/8 Rev.), the Delegation of Japan (document IPIC/CE/III/9) and the Delegation of Denmark on behalf of the Member States of the European Communities (document IPIC/CE/III/10).

In addition, it was pointed out that an exemption from paragraph (1) should also be made with respect to single copies made for private use. The Chairman noted that the proposal in document IPIC/CE/III/8 would cover the situation.

It was agreed that the International Bureau should further study the three proposals contained in documents IPIC/CE/III/8, 9 and 10 and the suggestion for an exemption of single private copies, in particular examining the questions whether the exception for the purposes of teaching or research should be made mandatory and whether the expression 'reverse engineering' should be used in the treaty, an expression which, although currently used in industrial circles and contained in the title of Section 906 of the Semiconductor Chip Protection Act of the United States of America, had not been adopted in any of the legislative texts so far enacted.

Paragraph (5). With respect to item (i), it was pointed out that the draft could be improved by replacing the text starting with the words 'the performance' by the following: 'the continuing performance of such acts in respect of microchips or industrial articles acquired in good faith before such event and still in the possession of such party shall entail the obligation to pay reasonable remuneration to the proprietor but no other sanctions.'

Thus, it should in particular be clarified that (as this was already the intention of the draft) there was in no case an obligation to pay remuneration for articles already distributed in good faith.

It was suggested that paragraph 55 of the Notes be amended, in order to bring it into line with the provision of paragraph (5)(i), by deleting the words 'copies of layout-designs' in the sixth line of that paragraph.

Some delegations suggested that the provision of paragraph (5)(i) be made optional, in view of strict provisions concerning the payment of remuneration, existing under certain national laws, or as an alternative, to delete the words 'but no other sanctions.'

With respect to item (ii), it was suggested that this provision be made more explicit, in particular as regards the question whether or not it concerned unauthorized copies of layout-designs.

The question was raised why the draft Treaty provided for the principle of exhaustion of rights in paragraph (5)(ii) without any territorial restriction. It was observed that such an unrestricted international exhaustion could cause serious problems, and that the application of the exhaustion principle should at least be limited to first marketing in Contracting States. Moreover,

reference was made to Article 5, paragraph 5, of the EEC Directive, according to which exhaustion only applied where products had been put on the market in a Member State of the EEC. However, support was also expressed for the existing text of paragraph (5)(ii) as it was considered to be an important element of the balance struck in the draft Treaty. Some delegations expressed doubts about the inclusion of the principle of exhaustion in the draft Treaty.

Paragraph (6). Reference was made to the proposed deletion of paragraph (1)(a)(iii), which would have the consequence that paragraph (6) would also have to be deleted. Some delegations found this paragraph superfluous, if the unlawful act in Article 4(1)(a)(iii) of importation was limited to importation for selling or otherwise distributing."

Formalities. Article 5 of the proposed draft read as follows:

"(1) Any Contracting State may make protection conditional upon the filing of material allowing the identification of the layout-design and, where commercial exploitation precedes such filing, of a statement concerning the date of first commercial exploitation with a national or international public authority and the registration of the proprietor's claim to protection by such authority, provided that the time allowed for effecting such filing shall be at least two years from the date on which the proprietor first exploits commercially the layout-design, the microchip that incorporates that layout-design or the industrial article that contains such microchip. Registration may be subjected to the payment of a fee. Where part of the identifying material would contain confidential information, the proprietor cannot be obliged to file such part, as long as the filed material is sufficient to allow the identification of the layout-design.

(2) Any Contracting State may require that changes concerning the information on the proprietor contained in the initial registration be registered with the said authority to be effective against third parties.

(3) No Contracting State shall make protection conditional upon the fulfillment of any formality other than those referred to in paragraphs (1) and (2)."

The corresponding passage in the report reads as follows:

"The text of this Article was supported by a number of delegations. In particular, the following comments were made.

Paragraph (1). Attention was drawn to the fact that, under provisions of a particular national law, the filing and registration of material allowing identification of the layout-design were required to be effected with a non-profit organization which had been entrusted with certain functions of public authority. It was recognized that this system is in conformity with the draft Treaty.

Several delegations suggested that the period allowed for filing the identifying material after first commercial exploitation should be reduced from two years to six months.

Several delegations proposed that the last sentence of paragraph (1) should be deleted because withholding identifying material would be contrary to the purpose of the system of filing such material which, in the view of these delegations, served to disclose the relevant technology and was not consistent with the practice in other intellectual property treaties that require full disclosure.

Attention was drawn to the system under consideration in several countries according to which the entire identifying material (including confidential parts) had to be filed but the proprietor can request that confidential parts be kept as such unless a disclosure was ordered by a court because of important reasons, for example, in connection with an infringement suit. On the other hand, several delegations underlined the importance of retaining the last sentence of paragraph (1).

One delegation suggested adding the words 'as disposed in its national law' after the word 'material' in the second line.

Paragraph (2). In view of the fact that the registration of changes concerning the information on the proprietor was not a condition of protection, it was proposed to delete the reference to paragraph (2) in paragraph (3). It was suggested simplifying the draft of paragraph (2) by speaking of the registration of the transfer of the right.

Paragraph (3). It was suggested that the possibility should be studied of allowing an internationally recognized notice requirement which would replace any national formality requirement, following the example of the copyright symbol referred to in Article III(1) of the Universal Copyright Convention.

The question was raised whether paragraph (3) could be understood as excluding the possibility for national laws to require that foreign applicants be represented by local agents. If that was so, an amendment should be made in order to clarify that the said requirement should be permitted.

Some delegations suggested that countries should be free to require, as a condition of protection, that copies of layout-designs or microchips be actually offered for sale in the country where protection was sought. This suggestion was opposed by other countries."

Term of Protection. Article 6 of the proposed draft read as follows:

"(1) The protection provided for in Article 4 shall last at least 10 years counted from either of the following two dates:

(i) the date of the registration, in the Contracting State in which protection is claimed, of the proprietor's claim to protection,

(ii) the date on which, anywhere in the world, the proprietor first exploits commercially [and without conditions of confidentiality] the layout-design of an integrated circuit, the microchip that incorporates such layout-design or the industrial article that incorporates such microchip.

(2) Where, under the national law of a Contracting State, protection starts only upon registration, but where commercial exploitation has started before registration, the proprietor shall have the right to a reasonable remuneration in respect of any act performed in that State before registration which, after registration, requires his authorization by virtue of Article 4.

(3) Any Contracting State may provide that, where a layout-design has not been commercially exploited, anywhere in the world, within a period of 15 years from its [creation] any protection provided for in Article 4 shall come to an end, and that no such protection shall come into existence unless a filing according to Article 5(1) has been effected where the Contracting State makes protection conditional on such a filing."

The corresponding passage of the report reads as follows:

"Paragraph (1). With regard to the term of protection, several delegations expressed the view that a duration of 10 years as foreseen in the draft Treaty was far too long, taking into account the relatively short lifespan of integrated circuits, and that the term of protection should be reduced to five years.

One delegation, supported by some other delegations, proposed that the duration of the protection should be fixed at five years, but that it should be possible to extend the protection for another period of five years where the protected layout-design had preserved its commercial value.

Several delegations, on the other hand, expressed their strong support for the term of 10 years as proposed by the International Bureau, underlining that only a sufficiently long duration of the protection would enable the proprietor to derive rewarding benefits from his creation with regard to the high investments involved in such creation.

One delegation proposed that, in the first sentence of paragraph (1), the words 'from the earlier of the following dates' should be added, and that, in subparagraph (ii), the words put in brackets should be deleted. Another delegation proposed that, in paragraph (1), a subparagraph (iii) should be added, making reference to the date of creation of the layout-design, or to the date of the first fixing or encoding of the layout-design, a wording used in Article 7(1)(c) of the EEC Directive. Several delegations said that, in paragraph (1)(i), rather the date of the filing of the application for registration should be referred to, in order to avoid that a delay in the processing of the registration might negatively affect the starting of protection for the applicant.

Paragraph (2) was not the subject of any observations.

With regard to *paragraph (3)*, the question was raised of what the period of 15 years was supposed to mean, and whether a term of protection of up to 25 years would have to be envisaged under that provision. Some delegations expressed the view that, in fact, the term of protection, though as such restricted to 10 years under their national laws currently in force or under preparation, might reach into the 25th year after the creation of the layout-design, but under the proviso that the protection had commenced within the period of 15 years prescribed in national or regional legal instruments which had the same wording as paragraph (3), and that no protection could be obtained after the lapse of the period of 15 years. Some delegations suggested to make the provision mandatory.

Several delegations proposed that this period should be changed from 15 years to two years for consistency with the grace period in Article 5(i), as this period related to non-registration and non-exploitation commercially.

It was agreed that the wording of paragraph (3) should be reconsidered in order to clarify its concrete meaning, and to study the repercussions of that provision."

Assembly. Article 7 of the proposed draft read as follows:

"(1)(a) An Assembly consisting of all Contracting States is hereby established.

(b) The Government of each Contracting State shall be represented by one delegate who may be assisted by alternate delegates, advisors and experts.

(c) The expenses of each delegation shall be borne by the Government that has appointed the delegation.

(d) Each Contracting State shall have one vote in the Assembly.

(e) The Assembly shall meet in ordinary session once every two years.

(2) The Assembly shall deal with matters concerning the application and operation of this Treaty.

(3)(a) The Assembly may decide the convocation of conferences for revising this Treaty.

(b) The Assembly may, by unanimous decision, amend the definitions contained in Article I, items (iv) to (vi).

(4) The Assembly shall establish its own rules of procedure.

(5) The International Bureau of the World Intellectual Property Organization shall be at the disposal of the Assembly to prepare its sessions and to service such sessions. It shall assemble and publish information concerning the protection of layout-designs including the texts, and translations of the texts, of pertinent national laws and regional regulations."

The corresponding passage in the report reads as follows:

"With regard to this and the following Articles, and in particular also Article 8, the desire was recalled that the Treaty should allow for participation by the European Community. These provisions should therefore be adapted to accommodate the Community as a possible party to the Treaty."

Becoming Party to the Treaty. Article 8 of the proposed draft read as follows:

"(1) Any State member of the World Intellectual Property Organization or of the United Nations may become party to this Treaty

(i) by signature followed by the deposit of an instrument of ratification, or

(ii) by the deposit of an instrument of accession.

(2) Instruments of ratification or accession shall be deposited with the Director General.

(3) No reservations to this Treaty are permitted at the time of signature, ratification, accession or at any other time."

The corresponding passage in the report reads as follows:

"The Delegation of Ghana raised the question of why paragraph (3) expressly excluded reservations from the Treaty, as this seemed to be quite unusual.

It was answered that it was the general treaty-making practice of the Organization to expressly state whether reservations to a treaty or convention were permitted or not, as otherwise the silence of the text in this respect could be interpreted as if any reservation might be admissible. As the draft Treaty as it stood did not contain any provision with the possibility of a specific reservation, the draft was therefore in accordance with the generally accepted practice to expressly clarify that no reservations were permitted. Pending a decision of a diplomatic conference, if any, that certain reservations were allowed, the text at least for the present stage of discussions was without doubt correct."

Entry Into Force of the Treaty. Article 9 of the proposed draft read as follows:

"(1) This Treaty shall enter into force three months after ... States have deposited their instruments of ratification or accession.

(2) Any State which is not among those referred to in paragraph (1) shall become bound by this Treaty three months after the date on which it has deposited its instrument of ratification or accession or at any later date indicated by the State at the time of the depositing of its instrument of ratification or accession.

(3) Any Contracting State shall have the right not to apply this Treaty to any layout-design that exists at the time that State becomes bound by this Treaty, provided that this provision does not affect any protection that such layout-design may, at that time, enjoy in that State by virtue of the national law or international obligations of the said State."

The corresponding passage in the report reads as follows:

"A delegation expressed the view that a high number of ratifications should be required for the entry into force of the Treaty as the Treaty should reflect a broad consensus of the international community. Therefore it would like to support a proposal already made by another delegation during the last session of the Committee of Experts which foresaw that ratification of the Treaty by at least one third of the Member States of WIPO should be required. It was agreed, however, that this question had to be decided by a diplomatic conference and went beyond the competence of the Committee of Experts."

Denunciation of the Treaty. Article 10 of the proposed draft read as follows:

"(1) Any Contracting State may denounce this Treaty by notification addressed to the Director General.

(2) Denunciation shall take effect one year after the day on which the Director General has received the notification."

There is no passage in the report dealing with the above draft article.

Signature and Languages of the Treaty. Article 11 of the proposed draft read as follows:

"(1)(a) This Treaty shall be signed in a single original in the English, Arabic, Chinese, French, Russian and Spanish languages, all texts being equally authentic.

(b) Official texts shall be established by the Director General, after consultation with the interested Governments, in such other languages as the Assembly may designate.

(2) This Treaty shall remain open for signature at Geneva until [six months after its adoption]."

There is no corresponding passage in the report dealing with the above draft article.

Depositary Functions and Notifications. Article 12 of the proposed draft read as follows:

"(1) The original of this Treaty shall be deposited with the Director General.

(2) The Director General shall transmit two copies, certified by him, of this Treaty to the Governments of all the States referred to in Article 8(1) and, on request, to the Government of any other State.

(3) The Director General shall register this Treaty with the Secretariat of the United Nations.

(4) The Director General shall notify the Governments of the States referred to in Article 8(1) of:

(i) signatures under Article 11;

(ii) deposits of instruments of ratification or accession under Article 8(2);

(iii) the date of entry into force of this Treaty under Article 9(1);

(iv) denunciations received under Article 10."

The passage in the report concerning Articles 10 to 12 reads as follows:

"These Articles were not the subject of any observations."

III. Discussion of a Provision Concerning "Consultation Procedure"

The report of the Committee of Experts contains the following on this subject:

"The Delegation of the United States of America introduced its proposal contained in document IPIC/CE/III/4,⁴ underlining the particular importance it attached to this proposal. The Delegation pointed out that the procedure foreseen in that document was meant to settle problems of the interpretation and implementation of the Treaty arising between States party to the Treaty. The draft Treaty contained a lot of options, and therefore it seemed to be absolutely necessary to clarify the rights and obligations for the States party to the Treaty. The procedure in no way should serve to deal with private litigation or merely trade-related issues. The functions assigned to the Assembly and the decisions to be taken by a panel of experts in the framework of the consultation procedure clearly would strengthen the role of these organs.

⁴ The proposal contains draft treaty provisions for "Consultations," "Dispute Settlement" and "Enforcement."

Several delegations stated that they could not accept the proposal put forward by the Delegation of the United States of America. Disputes with regard to the protection of layout-designs of integrated circuits normally would arise between private parties, would not involve the States party to the Treaty and should be dealt with by the competent domestic judicial authorities. It was not appropriate to draw a parallel to the dispute regulations in the framework of GATT as such disputes concerned trade-related aspects and involved the political and economic interests of the States party to GATT. In addition, some delegations stated that they would not be in a position to accept a normal dispute clause making reference to the competence of the International Court of Justice or another international court as it was the policy of their governments not to be bound by clauses on obligatory international arbitration. If the draft Treaty would contain such a clause, an express reservation would have to be foreseen in the Treaty as well.

Several other delegations expressed the view that, in principle, they could support the proposal for a consultation procedure, subject to a closer study of the details of the proposal and subject to satisfactory answers to such questions as the question of who should bear the cost of the procedure.

Consequently, the Delegation of the United States of America requested that the International Bureau prepare a new text on consultation procedure taking into account the views expressed at the meeting."

IV. The Proposal of India

The Delegation of India presented the draft of a "Codicil to the Berne Convention for the Protection of Integrated Circuit Designs."

The draft Codicil—38 pages long—was presented to the Committee of Experts by the Delegation of India but it was only briefly discussed. The report of the Committee of Experts contains the statement of the Delegation of India made when introducing the draft Codicil.

LIST OF PARTICIPANTS**

I. States

Argentina: C.M. Correa; D. Chuburu. **Australia:** L.G. Honcope. **Austria:** C. Thun-Hohenstein. **Belgium:** D. Vandergheynst. **Brazil:** C.I.Z. Mammana; R. Stille; M.F. Cruz; R. Gasparly Torres. **Bulgaria:** T. Makedonski. **Cameroon:** W. Eyambe. **Canada:** H.P. Knopf; P.K. Ebsen; M.J. Piattelli. **Colombia:** L.-A. Luna. **Denmark:** L. Østerborg; N.H. Svendsen. **Finland:** J. Lieder; K.M. Tarhio; S. Lahtinen; H. Rähä. **France:** B. Vidaud; C. Girard. **German Democratic Republic:** F. Jonkisch. **Germany (Federal Republic of):** I. Koch; H.J. Klier. **Ghana:** A.M. Abdullah. **Greece:** A. Bizas. **India:** G. Soni; P.G. Hebalkar; A. Malhotra. **Ireland:** A. Coleman-Dunne. **Italy:** M.G. Fortini; C. Pompei. **Japan:** Z. Kitagawa; Y. Masuda; S. Kamogawa; M. Nagao. **Luxembourg:** F. Schlessler. **Madagascar:** R.G. Razafimahefa. **Mexico:** M.A. Arce de Jeannet. **Morocco:** A.

Bendaoud: Netherlands: M. Martin; E.C. Nooteboom; J. Meijer-van der Aa. **Norway:** J. Bing. **Pakistan:** M.A. Khan. **Panama:** I. Aizpúria Pérez. **Republic of Korea:** T.-C. Choi. **Soviet Union:** N. Popov; V.V. Varfolomeev. **Spain:** J.-D. Vila Robert. **Sweden:** R. Halvorsen; J.-E. Bodin. **Switzerland:** J.-L. Comte; F. Probst. **United Kingdom:** D.M. Haselden. **United Republic of Tanzania:** E.E.E. Mtango; K.J. Suedi. **United States of America:** R. Oman; D. Schrader; M.S. Keplinger; M. Dadant; W.H. Skok; P. Behnke; E.H. Baxter; A.M. Harkins; R.R. Rader. **Uruguay:** R. González-Arenas. **Yugoslavia:** R. Tešić.

II. Intergovernmental Organizations

Commission of the European Communities (CEC): R.J. Coleman; B. Schwab; M. Langer; C. Bail. **Council of European Communities:** R.-J. Meijer. **European Free Trade Association (EFTA):** S. Norberg; L. Ólafsdóttir.

III. Non-Governmental Organizations

British Computer Society (BCS): R.J. Hart. **Committee of National Institutes of Patent Agents (CNIPA):** W. von Willich. **Computer and Business Equipment Manufacturers Association (CBEMA):** E.W. Brown. **Electronic Industries Association of Japan (EIAJ):** O. Fujii; K. Nakamura. **Industrial Property Cooperation Center (IPCC):** S. Yamaguchi. **International Association for the Protection of Industrial Property (AIPPI):** T. Mollet-Vieville. **International Chamber of Commerce (ICC):** S. Bernhard; J.W. Veerman; E.H. Brown; A. Koerber; J.M.W. Buraas. **International Federation of Industrial Property Attorneys (FICPI):** K. Raffinsoe; T.D. Jennings; H. Bardehle. **International Law Association:** B. Colas. **International League for Competition Law (LIDC):** J.-F. Léger. **International Patent and Trademark Association (IPTA):** R.S. Laurie. **International Publishers Association (IPA):** J.A. Koutchoumow. **Max Planck Institute for Foreign and International Patent, Copyright and Competition Law:** T.K. Dreier. **Semiconductor Industry Association (SIA):** R.M. Gadbaw. **The Chartered Institute of Patent Agents (CIPA):** R.J. Hart. **Union of European Practitioners in Industrial Property (UEPIP):** H.-E. Böhmer. **Union of Industries of the European Community (UNICE):** R.J. Hart; A. Koerber; J.W. Veerman; M. Colombe.

IV. Officers

Chairman: J.-L. Comte (Switzerland). **Vice-Chairmen:** G. Soni (India); N. Popov (Soviet Union). **Secretary:** L. Baeumer (WIPO).

V. International Bureau of WIPO

A. Bogsch (*Director General*); M. Porzio (*Deputy Director General*); A. Schäfers (*Deputy Director General*); L. Baeumer (*Director, Industrial Property Division*); C. Rogers (*Consultant, Industrial Property Division*); M. Weil-Guthmann (*Consultant, Industrial Property Division*).

** A list containing the titles and functions of the participants may be obtained from the International Bureau.

Vienna Union

Committee of Experts for the International Classification of the Figurative Elements of Marks

First Session
(Geneva, May 11 to 13, 1987)

NOTE*

The Committee of Experts set up under Article 5 of the Vienna Agreement Establishing an International Classification of the Figurative Elements of Marks held its first session in Geneva from May 11 to 13, 1987.

The following member countries of the Vienna Union were represented: Luxembourg, Netherlands, Sweden (3). China, Denmark, Germany (Federal Republic of), Madagascar, Spain and Switzerland were represented by observers. The Benelux Trademark Office was also represented by observers. The list of participants follows this Note.

The Committee of Experts adopted its rules of procedure and a Recommendation to the countries of the Vienna Union for the purpose of facilitating the use of the Classification and promoting its uniform application, in conformity with Articles 5(2)(b) and 5(4) and with Article 5(3)(ii), respectively, of the Vienna Agreement. It also adopted a list of international non-governmental organizations which should be invited to be represented by observers at its meetings.

The Committee of Experts adopted the draft amendments and additions to the Classification that had been made by the Provisional Committee of Experts at its sessions held in Geneva from December 15 to 19, 1975, and from June 28 to July 2, 1976. Finally, the Committee of Experts studied and adopted a number of proposals for changes in the Classification submitted by the Benelux Trademark Office.

The Committee of Experts decided that the changes in the Classification would enter into force on January 1, 1988. A new edition of the Classification will then be published and be considered the second edition.

* Prepared by the International Bureau.

LIST OF PARTICIPANTS**

I. Member States

Luxembourg: H. Kleyweg. Netherlands: F. Launspach. Sweden: K. Sundström.

II. Observer States

China: Wu Qun; Cheng Xi. Denmark: I. Sander; B. Nehm. Germany (Federal Republic of): H. Richter. Madagascar: R.G. Razafimahera. Spain: E. Sanchez Arias; E. Yuguero Marugán. Switzerland: J. Weber.

III. Intergovernmental Organization

Benelux Trademark Office: F. Launspach; H. Kleyweg.

IV. Officers

Chairman: F. Launspach (Netherlands). Vice-Chairman: K. Sundström (Sweden). Secretary: C. Leder (WIPO)

V. International Bureau of WIPO

P. Claus (*Director, Classifications and Patent Information Division*); C. Leder (*Head, Trademark and Industrial Design Classifications Section, Classifications and Patent Information Division*); M. Kaufmann (*Classifications Assistant, Trademark and Industrial Design Classifications Section*).

** A list containing the titles and functions of the participants may be obtained from the International Bureau of WIPO.

Studies

Protection of Confidential Information Required to be Disclosed to Government Authorities

C.L. CLEMENTE*

**The Protection of Confidential Data Communicated
to Public Authorities, Particularly with Regard to Chemicals**

A Selective Study of European Legislation

J.-M. DEVOS*

Utility Models: The Experience of the Federal Republic of Germany*

E. HÄUSSER**

News Items

History, Development and Main Provisions of the UPOV Convention

Thirty years ago, in February 1957, the Ministry of Foreign Affairs of the French Republic invited the following 12 European States to participate in a diplomatic conference: Austria, Belgium, Denmark, Finland, Germany (Federal Republic of), Italy, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, together with the following intergovernmental organizations:

- United International Bureaux for the Protection of Intellectual Property (BIRPI);
- Food and Agriculture Organization of the United Nations (FAO);
- Organisation for European Economic Co-operation (OEEC).

The Conference's objective was to study the protection of breeders' rights in new plant varieties.

The first session of the Paris Diplomatic Conference was opened on May 7, 1957, by Mr. Loustau, Under-Secretary of State for Agriculture, and Mr. Ferru, Head of the French Delegation, was unanimously appointed President. The first session did not, however, lead to adoption of a convention, but only to adoption of a Final Act providing for continuation of the Diplomatic Conference at a later date following further preparatory work.

This further preparatory work lasted from 1957 to 1961 and a new draft international convention for the protection of plant varieties was drawn up during the course of a number of meetings of experts. Mr. Bustarret, Delegate of France and Chairman of the Committee of Experts, said, with regard to a second session of the conference, that the experts "saw no need to prolong discussions; because only the conference could decide upon the various matters on which they had not been able to reach unanimous agreement." Nevertheless, he stressed the "climate of mutual understanding and friendly cooperation that had reigned during the Committee's work."

On July 11, 1961, the Minister for Foreign Affairs of the French Republic invited the States and intergovernmental organizations that had participated in the first session to a second session of the Diplomatic Conference, together with the European Economic Community (EEC) and the following non-governmental organizations:

- International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL);

- International Association for the Protection of Industrial Property (AIPPI);
- International Community of Breeders of Asexually Reproduced Fruit Tree and Ornamental Varieties (CIOPORA);
- International Federation of the Seed Trade (FIS).

The second session of the Conference opened in Paris on November 21, 1961, at the International Conference Center of the Ministry of Foreign Affairs. Among participants in the Conference were the foremost experts of the time taking part as delegates, for example, Dirk Böringer, Jean Bustarret, Bernard Laclavière, Halvor Skov, Ludwig Pielen and Leslie Smith, as well as the following experts who participated as observers: Claude Hutin, René Royon, Ernest Tourneur and André de Vilmorin. On December 2, 1961, the 41 articles of the International Convention for the Protection of New Varieties of Plants were adopted and signed by plenipotentiaries of Belgium, France, Germany (Federal Republic of), Italy and the Netherlands. During the following year, in which it remained open for signature, the Convention was also signed by plenipotentiaries of Denmark and the United Kingdom on November 26, 1962, and by the plenipotentiary of Switzerland on November 30, 1962.

Article 27(2) of the Universal Declaration of Human Rights, adopted by the United Nations General Assembly in 1948, states that "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

Convinced of the importance attaching to the protection of new varieties of plants, not only for the development of agriculture but also for safeguarding the moral and material interests of breeders, the signatory States deemed that it was highly desirable for such a right to be guaranteed and recognized in accordance with uniform principles clearly defined in the Convention. The protection granted, or likely to be granted, to breeders of new plant varieties, whatever the legal system in force (special title of protection or patent), presumes that the new varieties fulfill the following criteria:

- they must be distinguishable by one or more important characteristics from the known varieties;

- they must be sufficiently homogeneous;
- they must be stable in their essential characteristics after repeated reproduction or propagation.

The effect of protection of new varieties is to make any sale of propagating material for the variety subject to the breeder's authorization.

Although the protection of new plant varieties was first instituted at the national level, the creation of the Convention and of UPOV has visibly contributed towards a global development that corresponds to Article 27 of the Universal Declaration of Human Rights in the field of plant breeding. Since the beginning of the twentieth century, with the help of the progress made in genetics, enterprises have specialized in the costly, difficult and painstaking work of creating new plant varieties.

The first instrument of ratification was deposited in 1965 by the United Kingdom, the second in 1967 by the Netherlands, and the Convention entered into force after ratification by the Federal Republic of Germany on August 10, 1968.

This was the origin of the International Union for the Protection of New Plant Varieties (UPOV).

Like many other international organizations, UPOV chose Geneva for its headquarters.

However, this account would not be complete without consideration of the Union's evolution through the Convention and of the persons who made valuable contributions to its development.

The Convention was revised twice: a first modification of limited scope was contained in the 1972 Additional Act; the second revision in 1978 stemmed from the realization that "certain amendments to the Convention [were] necessary to facilitate accession by States that had not yet acceded to the Convention."

Many persons contributed to the establishment of UPOV. But here it is necessary to make special mention of the Presidents of the UPOV Council, the Secretaries-General and the Vice Secretaries-General:

The Presidents of the Council were, in order:

- Mr. Leslie Smith, United Kingdom, 1968-1971;
- Mr. Ludwig Pielen, Federal Republic of Germany, 1971-1974;
- Mr. Bernard Laclavière, France, 1974-1977;
- Mr. Halvor Skov, Denmark, 1977-1980;
- Mr. Walter Gfeller, Switzerland, 1980-1983;
- Mr. Jean Rigot, Belgium, 1983-1986; and
- Mr. Stanley Schlosser, United States of America, the current President, for a period of three years until 1989.

The office of Secretary-General was occupied by Professor G.H.C. Bodenhausen from 1969 to 1973 and from then on by Dr. Arpad Bogsch.

The list of Vice Secretaries-General is almost as short: Halvor Skov, from August 1, 1970, to February 28, 1974, followed by the late Heribert Mast from

March 4, 1974, to August 11, 1986, and then, since December 1, 1986, by Walter Gfeller.

The main provisions concerning protection contained in the International Convention for the Protection of New Varieties of Plants of December 2, 1961, revised at Geneva on November 10, 1972, and October 23, 1978, are the following:

Protection is granted to the breeder of a new variety or his successor in title, whatever may be the origin, artificial or natural, of the initial variation from which the new variety results (therefore also to a person who has discovered a new variety).

States party to the Convention are required to grant the breeder the right to make his prior authorization necessary for the following:

- (a) production, for purposes of commercial marketing, of the reproductive or vegetative propagating material;
- (b) offering such material for sale;
- (c) repeated use of the variety for the commercial production of another variety;
- (d) commercial use of ornamental plants or parts thereof as propagating material in the production of ornamental plants or cut flowers.

From the above, it can be seen that the use of the new variety as an initial source of variation for the purpose of creating other new varieties, as well as the marketing of such varieties, is free. However, repeated use as outlined in subparagraph (c), above, is not free.

The 1978 Diplomatic Conference recommended that where, in respect of any genus or species, the granting of more extensive rights than those described above was desirable to safeguard the legitimate interests of the breeders, the Contracting States should take adequate measures.

With regard to recognition and protection of breeders' rights, member States must grant to nationals of the other member States and to persons domiciled or having their registered office in one of those States the same treatment as is accorded by their respective laws to their own nationals. Any member State may, however, limit the right to claim protection for a variety to nationals of member States that apply the Convention for the same genus or species as that of the new variety and to persons domiciled or having their registered office in any of those States.

The effect of the right of priority which States party to the Convention must recognize is that a breeder may file his first application for protection of a new variety in the member State of his choice. If he files an application for the same variety in another member State within a period of 12 months from the filing of the first application, he enjoys, on request, a right of priority for the subsequent application. Where a right of priority is claimed, the breeder's rights cannot be affected by an application filed for the same variety by another person during the period between filing of the first application

and filing of the subsequent application by the breeder, nor by use of the variety during that same period.

Each new variety must have a variety denomination. The denomination is registered at the time of issuing the title of protection and becomes the generic designation of the variety. This rule is mainly intended to prevent the denomination of a new variety registered in a member State from being used in another member State as the denomination of another variety of the same botanical species or of a closely related species. Member States must also ensure that no rights in the designation registered as the denomination of the variety hamper free use of the denomination in connection with the variety, even after the expiration of the protection.

The Convention is in principle applicable to all botanical genera and species (taxa). Member States must do everything possible to apply it to the largest possible number of taxa. They must apply it to at least five taxa when they become bound by the Convention and subsequently extend this number to at least 10 within a period of three years, to at least 18 within a period of six years and to at least 24 within a period of eight years.

The Convention sets out the conditions to be fulfilled by each new variety for which protection is sought. It does not allow the granting of protection to be subject to other conditions, apart from the fulfillment of formalities and the payment of fees. The Convention provides that a new variety must be clearly distinguishable by one or more important characteristics from any other variety whose existence is a matter of common knowledge. At the time of application for protection, the new variety must not have been offered for sale or marketed, with the agreement of the breeder, in the member State where the application has been filed (or where the law of that State so provides, not for longer than one year nor longer than four years in any other State (six years in the case of vines and trees, including their rootstocks)). In addition, the new variety must be sufficiently homogeneous and stable in its essential characteristics.

The Convention provides that the period of protection, computed from the date of issue of the title of protection, must be at least 18 years for vines and trees, including their rootstocks, and 15 years for all other plants.

The Convention allows each member State to grant protection for a new plant variety in the form of a special title of protection or of a patent.

The Convention authorizes restriction of the free exercise of the exclusive rights provided for in the Convention solely for reasons of public interest. Where public interest consists of ensuring the distribution of the new variety, the member State having recourse to restrictions must take all measures necessary to ensure that the breeder receives equitable remuneration.

Member States must register the denomination of a new variety at the same time as the title of protection for the variety is issued. Although the denomination is

chosen and proposed by the variety's breeder, it must conform to certain criteria laid down in some detail in the Convention. The denomination must enable the new variety to be identified and must not be liable to mislead or to cause confusion concerning the characteristics, value or identity of the new variety or the identity of the breeder. It must be different from every denomination which, in any member State, designates an existing variety of the same botanical species or of a closely related species. Except where there is a major obstacle, the new variety must be presented under the same denomination in all protection application procedures.

Member States must require that persons offering for sale or marketing reproductive or vegetative propagating material of a protected variety in that State use for this purpose the denomination of the variety and continue to do so even after the expiration of protection.

The International Union for the Protection of New Varieties of Plants has two permanent organs, the Council and the Office. The Council is comprised of representatives of member States. Each member State has one vote. The Council elects a President and at least one Vice-President from among its members.

The Council holds regular sessions at least once a year and its main tasks are the following:

(i) to establish and amend the Union's rules of procedure and administrative and financial regulations;

(ii) to examine and approve the budget of the Union and fix the contribution of each member State;

(iii) to appoint the Secretary-General and, if it finds necessary, a Vice Secretary-General and determine the terms of appointment of each;

(iv) to give to the Secretary-General all necessary directions for the accomplishment of the tasks of the Union;

(v) to examine the annual report on the activities of the Union and to approve the accounts;

(vi) to fix the program for the Union's future work, to fix the date and place of the Conferences on Revision of the Convention;

(vii) to study appropriate measures to safeguard and encourage the development of the Union;

(viii) take all necessary decisions to ensure the efficient functioning of the Union.

The Office of the Union is under the direction of the Secretary-General, who is also the Director General of the World Intellectual Property Organization (WIPO). The Secretary-General is assisted by a Vice Secretary-General, appointed by the Council, and by a small staff.

The Office carries out all the duties and tasks entrusted to it by the Council. It has its headquarters in Geneva and maintains close technical and adminis-

trative cooperation with the International Bureau of WIPO.

At July 1, 1987, UPOV comprised 17 member States: Belgium, Denmark, France, Germany (Federal

Republic of), Hungary, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States of America.

BOLIVIA

*Director General,
General Directorate of Standards and Technology*

We have been informed that Ing. Felix Miranda Cuevas has been appointed Director General of the General Directorate of Standards and Technology.

ECUADOR

"Director Nacional de Propiedad Industrial"

We have been informed that Dr. Francisco Cucalón Rendón has been appointed *"Director Nacional de Propiedad Industrial."*

JAPAN

Director General, Japanese Patent Office

We have been informed that Mr. Kunio Ogawa has been appointed Director General of the Japanese Patent Office.

Calendar of Meetings

WIPO Meetings

(Not all WIPO meetings are listed. Dates are subject to possible change.)

1987

September 3 to 11 (Geneva) — Permanent Committee on Patent Information (PCPI) and PCT Committee for Technical Cooperation (PCT/CTC)

September 14 to 19 and 22 (Geneva) — Consultative Meeting on the Revision of the Paris Convention (Fourth Session)

September 21 to 30 (Geneva) — Governing Bodies (WIPO General Assembly, Conference and Coordination Committee; Assemblies of the Paris, Madrid, Hague, Nice, Lisbon, Locarno, IPC, PCT, Budapest, TRT, Vienna and Berne Unions; Conferences of Representatives of the Paris, Hague, Nice and Berne Unions; Executive Committees of the Paris and Berne Unions; Committee of Directors of the Madrid Union; Council of the Lisbon Union): Ordinary Sessions

October 5 to 9 (Geneva) — Committee of Governmental Experts on Works of Applied Art (convened jointly with Unesco)

November 2 to 6 (Geneva) — Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions (Fourth Session)

November 23 to December 4 (Geneva) — Permanent Committee on Patent Information (PCPI): Working Group on Search Information

December 2 to 4 (Geneva) — Joint Unesco-WIPO Consultative Committee on the Access by Developing Countries to Works Protected by Copyright (convened jointly with Unesco)

December 7 to 11 (Geneva) — Committee of Governmental Experts on the Printed Word (convened jointly with Unesco)

UPOV Meetings

1987

October 6 to 8 (Geneva) — Technical Committee

October 8 and 9 (Geneva) — Administrative and Legal Committee

October 12 and 13 (Geneva) — Meeting with International Organizations

October 14 (Geneva) — Consultative Committee

October 15 and 16 (Geneva) — Council

1988

June 7 to 9 (Edinburgh) — Technical Working Party on Automation and Computer Programs

June 14 to 17 (Wageningen) — Technical Working Party for Vegetables

June 20 to 24 (Melle) — Technical Working Party for Ornamental Plants and Forest Trees

June 28 to July 1 (Hanover) — Technical Working Party for Fruit Crops, and Subgroups

July 5 to 8 (Surgères) — Technical Working Party for Agricultural Crops

Other Meetings Concerned with Industrial Property

1987

September 1 to 4 (Warwick) — British Library Japanese Information Service: International Conference on Japanese Information in Science, Technology and Commerce

September 4 to 6 (Stockholm) — International League for Competition Law: *Journées d'études*

September 22 to 25 (Strasbourg) — Center for the International Study of Industrial Property: Seminar on Licensing and the Transfer of Technology (second module: Strategy and Procedures for the Transfer of Technology)

November 8 to 11 (Budapest) — Pharmaceutical Trade Marks Group: 35th Conference entitled "Moscow to Madrid"

November 30 to December 4 (Strasbourg) — Center for the International Study of Industrial Property: Present Status of European Patent Law and Practice — Seminar on the Drafting of Claims and Oppositions

December 7 to 11 (Munich) — European Patent Organisation: Administrative Council

1988

January 25 to 30 (Strasbourg) — Center for the International Study of Industrial Property: Present Status of European Patent Law and Practice — Seminar on Legal Problems

March 24 (London) — Institute of Trade Mark Agents: International Conference on "New Vistas in Trade Marks"

June 27 to July 1 (Cannes) — International Federation of Industrial Property Attorneys: World Congress

September 15 to 18 (Angers) — International League for Competition Law: 30th Congress

